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AUTHOR Schulz, Harriette
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ABSTRACT

The publication contains abstracts and annotated bibliographical references of research projects and programs in adult basic education. The projects and programs cited represent the results of a survey to search out studies that delineate project population, methods, materials, and results. The survey was designed to limit the time period covered (1965-75) and the educational area covered (academic rather than vocational). The abstracts are arranged alphabetically by author in a 60-page section. A discussion section contains observations drawn from the survey supporting the conclusion that basic questions concerning adult education (what kind of teachers, teaching what kind of students, with what kind of content, at what level of complexity, and in what teaching style) have not yet been definitively answered. Those studies which seemed to be peripheral to the main survey and those which did not include sufficient achievement data are listed alphabetically by author in an annotated bibliography (Appendix A, 47 pages). Other appended materials include: approximate figures on grade level gains per unit of time, a suggested checklist for future research, and a list of sources contacted in gathering the documents (includes computer searches and references). (Author/MS)

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SURVEY OF ADULT EDUCATION PROGRAMS FOR THE DISADVANTAGED

September 1975

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SURVEY OF ADULT EDUCATION PROGRAMS FOR THE DISADVANTAGED

By Harriette Schulz
University of Missouri-Kansas City
Institute for Community Studies

Project Coordinator: Greg Hodes
Teaching Assistance Organization Inc.

with assistance from
The Career Education Consortium

Marijo Kimbrough, Research Assistant
Lovie Blackwell, Secretary
University of Missouri-Kansas City
Institute for Community Studies

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INTRODUCTION

The statement that today's world requires "more than strong backs and clever hands but rather trained minds, educated judgments and conceptual skills" has become a banality, a warmed-over, twice-told remnant of the 19th century. Yet, the economic, political and social factors related to underdevelopment--the aspiration for satisfying, useful lives and for participation in decision-making--have focused the 20th century public eye on education as perhaps the most viable means for achieving these aspirations and for developing the human resources of a community.

In its broadest sense, education should be much more than the vehicle for the mastery of basic skills. It should provide students with the motivation for continued learning, the techniques for managing knowledge and an understanding of how creative and elevating the wise use of leisure can be. Since most educators would doubtlessly subscribe to these goals, their social responsibility becomes greater to the degree that the parameters of the educative process become more inclusive. Cognizant of the great social costs of undereducation and illiteracy, educators look with dismay on a 1973 survey of educational attainment by the National Advisory Council on Adult Education which revealed that of the 110 million adults age 25 and over, 48% or about 53 million had not completed high school. Moreover, only a small proportion of these 53 million were being reached by adult education programs; between 1967 and 1971, 2.8 million, or approximately 5% were enrolled in the Federal Adult Education State Grant Programs. And this, in spite of the fact that there is ample evidence that there is a direct relationship between undereducation, poverty and social unrest.

The U. S. Office of Education noted as late as 1971 that the extent to which the need for adult basic education has been met and the quality and impact of services provided have not been determined. Information on the effectiveness of adult education programs in improving literacy, in raising the earnings capabilities of participants or in increasing the more intangible personal benefits is in general unavailable, irretrievable or incomplete. Many of the evaluative studies which have been done are marked by several defects: (1) data vary widely in completeness and reliability; (2) stated objectives are long-term effects--increased communication skills, employability and productivity, higher income--and may not be apparent until several years after completion of the program; (3) the large array of programs has resulted in overlap of target populations and program content, to the point that it has been difficult to isolate the effects of a single "treatment"; and (4) valid control groups have been difficult to obtain so that effects are highly presumptive. Moreover, and perhaps more basically, it is still to be determined which characteristics of the disadvantaged are most amenable to permanent change and which means will exert the most effective leverage on their total pattern of living. In short, and with few exceptions, neither workable strategies nor viable results have been identified or made available to those concerned with adult education.

In order to present a compendium of research projects--regardless of their shortcomings--in the field of adult basic education, the staff of this project, in a period of less than five months, attempted to survey and provide abstracts of those studies which appeared to offer at least some insight into strategies and results. The projects and programs cited in this survey do not represent an exhaustive search; such a task would have been impossible given the length of time available. Nevertheless, they do represent a genuine effort to search out studies that delineate the population, the methods, the materials and results of a variety of adult education programs. Emphasis throughout the search was on academic rather than vocational education, although a demarcation between the two approaches deprives each system of the benefits of the other. Nevertheless, the survey was designed to limit both the time period covered--the years 1965 to 1975--and the educational area covered--academic rather than vocational--in order to achieve some measure of coherency and orderliness. Those research studies which seemed to the staff to be peripheral to the main survey and those which did not include sufficient achievement data are listed in an annotated bibliography in Appendix A. Appendix B contains some approximate figures on grade level gains per unit of time, Appendix C suggests a checklist for future research, and Appendix D is a listing of sources contacted.

ABSTRACTS

Aker, George F. and others. Evaluation of an Adult Basic Education Program in a Southern Rural Community. Tallahassee, Florida: Florida State University, March, 1968.

A sample of 127 urban, 178 rural students in an adult basic education program was skewed toward the older end of the age continuum (56% aged 40-59) and toward the lower end of the income continuum (88% under $1,000 annual family income). Although 95% had attended school, only 8% had gone beyond seventh grade. Results for 183 participants after "several months of instruction" in reading, writing and mathematics: (1) a mean grade level advance of 2.6; (2) a 28% drop-out rate; (3) a participant satisfaction rate of 56% very much, 32% average, 3% little; (4) a perception by the majority of participants of no major problems; (5) a perception by the majority of teachers that although classes were too large, most students made satisfactory progress. Other findings: (1) the older the student, the less likelihood of dropping out; (2) lowest pre-test score students are more likely to achieve at higher levels; (3) highest post-test score students achieved at highest levels in terms of grade advancement; (4) students with vocational interests lasting 6-15 years were less likely to drop out than those with less than 6 or more than 15 years of interest; (5) high achieving centers were those with younger, female, married teachers, employed full-time in the program and with both progressive and community orientations. (See Irwin R. Jahns, p. 27.)

Ball, Samuel. The Argo-MIND Study: A Report and Evaluation of an Industrial Program of Adult Basic Education. New York: Columbia University, Teachers College, 1967.

This report describes a basic education course at the Chicago Argo plant of Corn Products as part of a MIND program (Methods of Intellectual Development) sponsored by the National Association of Manufacturers. One hundred sixty hours (later reduced to 79) of reading, spelling and arithmetic were offered to 38 men, average age 42, who had completed 8 grades but performed at the 4-5 grade level. Between June and December, 1966, the group gained 2.6 grades in word knowledge, 2.2 grades in spelling, 3 2 grades in arithmetic.

Berger, Dan. The First Year of Remedial Mathematics Instruction Under Open Admissions. A Report on the Results of Several Studies of the Remedial Math Program at City College of New York. Report No. 9. City University of New York, New York City College, October, 1971.

Approximately one-fourth of the 1970 freshman class of 2,440 was assigned to remedial mathematics courses at CCNY, after testing for placement. At the end of one semester, a few classes in each remedial course were re-tested with an appropriate part of the math test. The following were the results:

Pre- and Post-Test Results of Freshmen Enrolled in Remedial Math Courses

Courses*	N	Mean Pre-Test	Mean Post-Test	Change
50.1	14	1.86	6.06	+4.20
50.2	10	2.50	3.92	+1.42
54	13	5.61	8.57	+2.96
55	49	2.80	5.82	+3.02
56	31	2.70	5.75	+3.05

*Sample size for Math 50 was too small to include.

Pre- and Post-Test Results of Students Not Enrolled in Remedial Courses

Courses**	N	Mean Pre-Test	Mean Post-Test	Change
50.1	12	2.8	3.1	+0.3
50.2	7	3.3	2.3	-1.0
54	9	5.2	7.8	+2.6
55	8	2.8	3.1	+0.3

**Sample sizes for Math 50 and 56 were too small to include.

Data gathered later, however, indicated that the majority--62% of students--who completed a remedial course and continued on to a regular course did not pass the second course, but it should probably not be expected that students with one semester of remedial work can achieve at the same level of performance as students who did well on the math placement test and went directly into a regular math course.

Bowers, John. The Evaluation of a Special Educational Opportunities Program for Disadvantaged College Students. Final Report. Illinois University, Urbana, Office of Instructional Resources, June, 1971.

This report analyzes the early academic achievement of disadvantaged students admitted to the Special Educational Opportunities Program (SEOP) at the Champaign-Urbana Campus of the University of Illinois. Included among the special or restructured courses were Rhetoric, a writing laboratory, mathematics, psychology, Latin, general engineering and chemistry. Tutorial and counseling staff was also assigned to SEOP students. A follow-up survey indicated that approximately 70% of the 1968 SEOP men and 60% of the 1968 SEOP women completed the 4th semester; although regular students earned consistently higher mean grade point averages than did SEOP students, there was an abrupt increase in 4th semester GPA for all 1968 groups and in second semester GPA for all 1969 groups. In all cases, students with special or restructured courses showed higher mean grade point averages than did those in regular courses.

Bradtmueller, Weldon. Florida Adult Basic Education Migrant and Seasonal Workers Project. Florida State Department of Education, Tallahassee, 1968.

This 1967 summer migrant workers ABE program provided 420 instructional hours, half in basic education, half in pre-vocational education, over a period of 14 weeks. The average grade level gain was .58, from a pre-test average of 3.98 to a post-test average of 4.56. This gain represents approximately one-half year gain in 14 weeks. The smallest gain, approximately one-third year, was in vocabulary, the greatest, approximately two-thirds year, was in reading comprehension. Arithmetic gains were better than five months in the 14-week program. The higher pre-test scores made smaller gains; older students gained more in vocabulary and reading skills; the more formal education as a child, the less the gain during the program; the longer a student had been out of school, the greater the growth in vocabulary and computation, the smaller the growth in reading and problem solving. (See Irwin R. Jahns, p. 27.)

Brazziel, William F. "Effects of General Education in Manpower Programs," Journal of Human Resources, Vol. 1, No. 1 (Summer, 1966), pp. 39-44.

This article identifies differences in the post-training performances of graduates of two groups of trainees, one having completed a program of both basic and technical education, the other having completed technical training only. The experimental group (A) of 45 men in the Norfolk, Virginia MDTA program received instruction in reading, language arts, number skills and human relations for one-half day, spending the rest of the day in technical education. The technical education enrollees (B) spent a half day in technical classes plus one hour daily in supervised study. Two control groups of 45 men each--one receiving no instruction (C), the other a placebo group to test for the Hawthorne effect (D)--were provided. All groups were evaluated at the end of the course and were interviewed one year after training,

with the following results:

(1) Group A trainees had gained an average of approximately three years in reading and arithmetic.

(2) More Group A men were selected by the technical faculty as "most likely to succeed."

(3) Ninety-five percent of Group A men were employed at the end of the follow-up period as compared with 74% of Group B, 59% of Group C and 63% of Group D.

(4) The average weekly salary of Group A men was $83, compared with $71 for Group B, $46 for Group C and $50 for Group D.

(5) Thirty-one percent of Group A men had received promotions, compared with 25% of Group B and 12% of Groups C and D.

Brody, Lawrence and Hank Schenker. Discovering and Developing the College Potential of Disadvantaged High School Youth. A Report of the Fifth Year of a Longitudinal Study on the College Discovery and Development Program. City University of New York, New York, Office of Teacher Education, January, 1972.

This annual report describes the educational progress of 544 students in three 10th grade classes in New York City during the 1969-70 academic year. One-third had been admitted in September, 1967, one-third in September, 1968, one-third in September, 1969, into the College Discovery and Development (CDD) program, devised to discover and develop the college potential of disadvantaged youth who, without the benefit of intensive and long-range educational support, would be unlikely to enter college. Mean scores of students enrolled in each of the five centers (one in each of the buroughs) were as follow: vocabulary, 9.27; paragraph meaning, 9.28; mathematical problem solving, 7.96; computation, 7.81, all based on the Metropolitan Achievement Tests. Academic averages were in the 70s. Of the 311 CDD students in the 1967 program, 201 had been graduated by January, 1971, 108 with academic diplomas, 93 with general diplomas; 195 had been accepted by post-secondary institutions. After four semesters in college, a steady improvement in grade point averages was evident, as was the ability to carry a full college load. During the 1969-70 academic year, a tutorial program was introduced in which 644 students received special assistance during 14,632 tutoring hours, conducted by 206 tutors.

Brown, Dora A. and Anabel P. Newman. A Literacy Program for Adult City-Core Illiterates: (I) An Investigation of Experiential Factors Pertinent to Reading Instruction, (II) The Development of an Instrument to Predict Success in Learning to Read, and (III) A Study of the Initial Teaching Alphabet as a Teaching Method for Adult City-Core Illiterates. Office of Education (DHEW), Washington, D. C., Bureau of Research, October, 1968.

This study of 207 adult city-core illiterates from Buffalo and Niagara Falls, New York, reading below third grade level, examined their educational characteristics and abilities, the use of i.t.a. with adult-centered materials, and the variables predictive of reading gain. The mean age of the subjects was 46.6 years; most indicated they wanted to learn to read for highly utilitarian purposes: for self-improvement and improvement of their families, better job opportunities, good health and religion. The standardized tests and tests of potential showed that the subjects lacked a number of skills helpful to efficient and effective test taking. They usually had a low level of information, as well as low skills levels. Visual acuity was often inadequate. Pre- and post-test mean differences between 60 adult city-core illiterates instructed for 200 hours through the use of i.t.a. and 60 control group adults instructed according to methods traditionally used in the Buffalo adult basic education program were not significant. A relatively higher level of communication in the background and reading-oriented family situations were the most valuable predictive variables for reading gain potential.

Brudney, Juliet F. Strengthening the Neighborhood Youth Corps. United Neighborhood Houses, New York, September, 1969.

A description and evaluation of an enrichment program, including some skill training and follow-up, in Greater New York involving 159 teenaged high school drop-outs during the period September 15, 1968 to January 15, 1969. These enrollees received extra help with basic education, job-impeding personal needs, vocational goals, job placement and when needed, skill training. Of the 159 enrollees, 127 were female, 32 were male; median age was 19; 63% were receiving public assistance. They received 10-15 hours a week in remedial reading, language skills and arithmetic, in addition to preparation for high school equivalency exams. The teachers in all four centers developed their own curriculum and format, employing a variety of materials. Abbreviated forms of the Gates Reading Survey Test and Wide Range Achievement Test were used for in-take listing of reading and math. The complete Gates Reading Survey, Form II, was used when the enrollee left the program; this tested speed and accuracy and reading vocabulary as well as level of comprehension. After a three-month average period of remediation, final scores showed an average increase in mathematical abilities of slightly less than one grade level (+.9), with enrollees moving from 5.4 to 6.3. Twenty-two percent of the total test population increased their math scores by two grade levels or more. Final reading scores showed an increase of slightly more than one grade level (+1.1), with the group moving from 5.1 to 6.2 Twenty-six percent of the total test population were able to improve reading skills by two grades or more over a period of time averaging three months, or approximately 200 hours.

Cage, Bob N., Glenna Carr, James Crews and Douglas Patterson. Florida Compensatory Migrant "Learn and Earn" Program: An Evaluation. Florida State Department of Education, Tallahassee and Florida University, Gainesville, Institute for Development of Human Resources, August, 1971.

The purpose of this project was to evaluate the Learn and Earn Program in five Florida Counties. Thirty mobile units housing four pre-vocational programs were set up on 21 school campuses, primarily junior high schools. Pre- and post-test data were collected on 441 participating students, using various instruments, checklists, surveys and work sample tests (ranging from the Peabody Picture Vocabulary Test to teachers' weekly reports). Evaluation showed that the experimental group generally showed no significant advantage over the control group (N=353) in terms of reading comprehension, arithmetic-computation ability, and self-esteem; however, significant positive findings for the experimental group were indicated in the students' participatory ability in conducting oral job interviews and completing job application forms; in 11 of 14 areas of on-the-job work functions; in attendance; and in personal appearance, behavior relationship to peers, and punctuality.

California Department of Corrections. Survey of Inmate Educational Progress Within the California Department of Corrections. Sacramento, California, October, 1974.

This report continues the survey of the educational achievement of inmates in academic education programs conducted in institutions of the California Department of Corrections. The following table summarizes the current findings.

Enrollment and Achievement in Secondary Education Programs, By Termer Status of Participants

Termer Status	Enrollees	Total Months Enrolled	Avg. Months Enrolled	Avg. Gain in Months	Avg. Gain Per Month
First Termer	149	1,049	7.0	18.6	2.7
Parole Violator	22	142	6.4	20.7	3.2
Multi-Termer	34	264	7.8	14.7	1.9
Total	205	1,455	7.1	18.2	2.6

Total number of secondary diplomas awarded: 101

Carbuhn, Wayne McKinzig. Job Corpsmen Selection and Prediction of Successful Completion of the General Education Development (GED) Program at Clearfield Urban Job Corps Center. Ph.D. thesis, Utah University, Salt Lake City, 1969.

This research conducted at the Clearfield, Utah Job Corps Center was intended to help the advanced education department select and predict the performance of Corpsmen on the GED test. It investigated the nature of the relationship between the Corpsmen's educational performance and their demographic-biologic data, test data and social behavior; the satisfactory reading grade level for selecting Corpsmen; the advanced level of the Stanford Achievement Test (SAT) as a satisfactory predictor of GED test performance; and the contribution of the General Aptitude Test Battery (GATB) in the selection. Of the 319 Corpsmen who began the study, 157 completed the GED test with 120 passes. The results indicated that while age was not significant, ethnic group classification was an important factor in passing the GED test. Highest grades completed in school and other demographic-biologic data and social adjustment ratings were neither reliable indicators of level of academic achievement nor useful in differentiating the successful from the unsuccessful Corpsman.

Carpenter, Teryle and Corinne Sawyer. The Effect of a College Reading Program Upon the Reading Gains, Grade Point Ratio and Attrition Rate for High-Risk Freshmen, Part I, Reading Gains. Clemson University, South Carolina, 1971.

This study, conducted at Clemson University, involved 90 high-risk freshmen who were enrolled in special English sections on the basis of low verbal Stanford Achievement Test scores. Thirty students made up the experimental group; 60, the control group. On the basis of the Nelson-Denny Reading Test, after three one-hour sessions for 14 weeks using primarily self-programmed materials, the following results were obtained:

Means for Pre-Test and Post-Test Reading Scores

Source	Group	N	Pre-Test	N	Post-Test
Vocabulary	Experimental	30	21.6	30	26.9
	Control	60	25.9	54	27.7
Comprehension	Experimental	30	31.6	30	31.7
	Control	60	35.3	54	34.5
Total Reading	Experimental	30	51.5	30	58.6
	Control	60	57.8	54	62.2
Reading Rate	Experimental	28	206.8	29	304.6
	Control	58	241.2	53	266.5

Thus, the experimental group improved to the extent that on the post-test there was no longer a significant difference between the groups on vocabulary and total reading, and the experimental group's rate exceeded the control group's rate significantly with no loss of comprehension.

* Cincinnati Public Schools. Adult Learning Laboratories in Adult Basic Education for Use With Out of School Youth and Adults in Continuing Education Classes. Ohio, 1970.

This field project was developed to compare achievement in an adult learning laboratory and a sample of traditional ABE classes during 1968-69. One hundred four students participated in traditional classes, 116 in adult learning laboratories for 2½ hours daily. Pre-post tests, using Follett's Student Survey Test and the California Test Bureau's Test of ABE produced the following median gains after 100 hours of instruction:

	Traditional Classes	Adult Learning Laboratories
Reading-Comprehension	1.67	3.96
Reading-Vocabulary	1.33	1.21
Arithmetic-Problems	2.66	3.20
Arithmetic-Concepts	2.42	.62

Twenty-two students given reading instruction for 70 hours with Educational Developmental Laboratory's 300 Reading Program showed mean gains in reading comprehension of 3.81 and mean gains in reading vocabulary of 2.26.

(This analysis shows that educational needs are being served by both approaches.)

* Clements, Carl B. and John M. McKee. An Evaluation of the Effects of an Intensive Reading Program on a Group of Adults at Lower Academic Grade Achievement Levels. Elmore, Alabama: Rehabilitation Research Foundation, 1966.

This study deals with the effects of a reading program on overall grade-level gains and individual subtest gains of students in the Vocational E and D Project at Draper Correctional Center, Elmore, Alabama. The experimental group consisted of 26 students enrolled six months in MDTA training courses, each having a total score of 8.5 grades or below on the Metropolitan Achievement Test (MAT). These 26 trainees received 40 hours (4 hours/week for 10 weeks) of instruction in a reading program using materials and equipment from Perceptual Development Laboratories (P.D.L), as well as an average of 160 hours of remedial instruction using programmed materials. The control group consisted of 33 students who received an average of 160 hours of remedial instruction using programmed materials but no special reading instruction. Each trainee was given the MAT at the beginning and end of the course. The pre- and post-test results:

	Mean Grade Gains on MAT	
	Experimental Group	Control Group
Reading	2.39	.27
Language	1.27	.78
Word Knowledge	.63	.67
Spelling	.94	.91
Math Comprehension	1.46	1.63
Math Reasoning	1.19	1.31
Total Grade	1.37	1.05

The average grade gain made in reading by the experimental group, thus, was approximately nine times greater than the gain made by the control group.

Colvin, Charles R. "A Reading Program that Failed--Or Did It?" Journal of Reading, Vol. 12, No. 2, November, 1968, pp. 142-146.

This article is an account of an investigation to learn (1) what is the relationship between a Reading and Study Skills (RSS) course to the grade point average (GPA) of selected college freshmen; (2) if exposure to college life in general leads to improved skills; (3) if selected freshmen who take a RSS course make significantly larger gains on a standardized reading test than do those who do not take a RSS course. All 1967 summer freshmen students at State University College, Fredonia, New York, were given the Cooperative Reading Comprehension Test; students scoring below the 50th percentile were randomly assigned to either an experimental or control group. The experimental group received formal treatment in the RSS course; the control group did not. Findings indicated (1) there was no significant difference in the mean GPA's of experimental and control students; (2) exposure to college life in general did lead to significantly improved reading skills for both groups; (3) although the experimental group students improved more on re-test than control group students, the improvement was not significantly greater and could have been due to chance factors.

Cyphers, Augustus L. Right-to-Read. Final Report. September 1, 1972- May 31, 1975. Concord College, Athens, West Virginia, Federal Reformatory for Women, Alderson, West Virginia, July, 1975.

The Right-to-Read Alderson-Concord Community Based Project, funded in September, 1972, is operated in the facilities of the Federal Reformatory for Women, Alderson, West Virginia, for the benefit of residents with a reading level of less than 8.0 who wish to increase their reading ability and, thus, function more productively in society upon release. A total of 754 residents participated in the program; 348 or 46% completed the program and achieved a total number of 423.3 grade level increases and a mean grade level increase of 1.22 (Stanford Achievement Test). The average number of instructional hours per grade level increase was 67.12 hours. Eighty-four residents who participated in the program received GED diplomas. In accomplishing the objectives of the

program, each resident was provided with an academic and psychological climate in which she could be successful. A diagnosis of strengths and weaknesses in reading skills was completed and an individual reading program was prescribed accordingly. Monetary awards were provided for class attendance; in addition, each grade level increase brought an incentive bonus award.

De Vries, James and Lee M. Swan. "Adult Education for the Disadvantaged," Journal of American Indian Education, Vol. 12, No. 1 (October, 1972) pp. 27-33.

The Great Lakes Apprenticeship Center (GLAC) in Green Bay, Wisconsin was set up in 1969 by the Great Lakes Inter-Tribal Council and the Northeast Wisconsin Technical Institute to help disadvantaged American Indians qualify for, obtain and hold better jobs. Training depended on the individual's needs: after two weeks of orientation and evaluation, training from the third through the eighth week was aimed at improving basic skills in reading, vocabulary and math through a variety of materials and approaches. Job developers worked closely with the trainees in obtaining jobs and in follow-up after placement. Data were collected via a questionnaire mailed to 113 trainees who completed the program; 49 were returned. The following results were tabulated:

Change in Trainee Employment Adjustment
(N = 49)

Employment Adjustment Factor	Before	After	Change
Mean Annual Income	$2,220	$3,625	+ $1,405
Mean Weeks Worked Annually	31	38	+ 7
Mean Hourly Wage on Last Job	$2.38	$2.70	+ $0.32

Participants rated the program very favorably, as may be seen in the following table:

Ways Trainees Benefitted From Training
(N = 49)

Rank	Benefit	Points
1	Helped the trainee get a job	42
2	Helped trainee decide on the type of work he would like to do	39
3	Improved trainee's reading or math skills	35
4	Learned how to apply for a job	33
5	(a) Learned about apprenticeships	32
	(b) Gave trainee confidence in himself	32

* Dowling, William D. A Report of the Educational Component of a Coupled On-the-Job Training Program. Columbus, Ohio: Columbus Urban League, Ohio State University, Center for Adult Education, August, 1970.

This study of 75 Columbus inner-city residents, the majority of whom were black, evaluated the educational component of a training program. During three eight-week daily sessions from 8 a.m. to 4 p.m., trainees were taught communication skills (reading, spelling, vocabulary, speech), computational skills, social skills and adjustments; and orientation to business and industry. After graduation, the participants were placed in OJT positions by the Columbus Urban League. Using the General Aptitude Test Battery, the Metropolitan Achievement Test and the Vocational Preference Inventory, it was found that the increase in grade levels (average: .445 grades) over the eight weeks was not significantly related to success during OJT. Five months after completion of the educational component, 29 (48%) of 60 trainees assigned to OJT were still working for their original employers.

Drotning, John E., David B. Lipsky, and Myron D. Fottler. Jobs, Education and Training: Research on a Project Combining Literacy and On-the-Job Training for the Disadvantaged. Final Report. State University of New York at Buffalo, School of Management, Buffalo, New York, April, 1972.

This study focuses on Project JET (Jobs, Education and Training), a precursor of the broader NAB-JOBS program, sponsored by the NAACP and the Chamber of Commerce of Buffalo working through the Opportunities Development Corporation (ODC). Individual employers supplied jobs for educationally handicapped blacks, releasing them for two hours each day for tutoring in the "3 Rs." Trainees were paid for the time spent in tutoring and employers were reimbursed $30 a week for each trainee hired. The objective was to elevate a hard-core worker to the eighth grade level within a period extending to 44 weeks, while providing him with steady employment and some skill training. Between 1966 and 1969, JET placed more than 700 trainees with more then 230 employers in the western New York area: 93% were male, 87% were black, mean age was 34, 52% had not gone beyond eighth grade, 88% were unemployed at the time of admission. The experiences of about 300 trainees were analyzed. Although less than half of the JET employers thought the tutoring component was effective, two-thirds of the union leaders and 86.1% of the trainees interviewed thought it was effective. Those trainees tutored every day were much more likely to remain in the program than those tutored once a week for an entire working day. Overall, JET was considered a limited success: as of June, 1968, 42% completed the program and 65% were employed, although continued working status did not seem related to the trainee's JET experience, but rather to his status at the time of his enrollment in the program. There was a strong relationship between program completion and the wage rate. Low job attrition rates tended to be associated with a successful tutoring program and regular periodic counseling by JET representatives. The overwhelming majority of JET trainees viewed the program with favor and many expressed non-economic as well as economic benefits.

Eckman, Bruce. The Effects of Monetary Incentives on the Learning of Remedial English by Disadvantaged Trainees. Experimental Manpower Laboratory, Mobilization for Youth, Inc., New York, October, 1972.

Disadvantaged Spanish-speaking youth were reinforced for learning to speak, read and write the English language in three separate experiments. Eighty trainees (58 females, 22 males) were assigned equally to the experimental and control groups; their mean age was 18.46. The training periods ranged from 7-12 weeks and included both remedial English and typing. Incentives in the form of tokens or money were given to the experimental group while the control group received no incentive. The results of testing were as follow:

Mean Gain in English by Treatment Group

	Aural Comprehension (Lado)	Reading (Gates)	English Usage (Delacorte)
Experiment 1 (N=20)			
Experimental Group	17.50	0.33	31.90
Control Group	15.50	0.12	32.10
Experiment 2 (N=28)			
Experimental Group	10.00	1.62	20.40
Control Group	10.70	0.98	10.70
Experiment 3 (N=32)			
Experimental Group	17.50	0.78	8.80
Control Group	7.80	0.50	12.80

Thus, support was found in two of the three experiments for the hypothesis that monetary incentives significantly enhance experimental trainees' English proficiency skills, but no support was found for the subsidary hypothesis that financial incentives would improve daily attendance and performance in concurrently-taken related courses.

Edcon Associates. Operation Breakthrough, 1973-1974, Final Evaluation Report. Willow Grove, Pennsylvania, 1975.

Operation Breakthrough, Paterson, New Jersey, is a program to provide career ladders for Spanish-speaking industrial employees. This evaluation of its 1973-1974 program includes classroom observation and standardized test data. English as a second language classes, using a variety of instructional materials, were held for approximately six hours weekly in each of five factories, either prior to or after working hours; conversational, job-related and public usage English was emphasized. The average age of the 133

(110 males, 23 females) program participants was 35.2 years with 7.7 years of schooling. The average number of hours of instruction was 92.1. Pre-post-test data were compiled using the Ilyin Oral Interview and the E.S.L. Diagnostic Test and the results were as follow:

	Pre-Test Scores	Post-Test Scores
Ilyin Oral Test	58.7	85.2
E.S.L. Diagnostic Test	49.6	64.0

A total of 53 students, or 39.8% of the total number enrolled, received certificates; 10 of the students were referred to GED programs, 5 to colleges, 6 to other educational programs and 2 for employment.

Endwright, David. Report to the Director. Florida Division of Corrections, Tallahassee, Florida, 1968.

This report deals with the basic education program offered to inmates of Florida correctional institutions. This voluntary, full-time program, using inmate instructors, showed that intermediate students (pre-test grade levels of 4.0-7.9) made faster gains than primary students (pre-test grade levels of 0.0-3.9), with advanced level students (pre-test grade levels of 8.0-12.0) making the greatest gains: a .6 grade level gain every 8 months for primaries, a .9 grade level gain every 8 months for intermediates, a 2.6 grade level gain every 8 months for advanced. The gain for 166 students averaged 1.5 grade levels every 7½ months, with whites making somewhat faster gains than non-whites. The average age of the student was 40; the average IQ, 95. (See Irwin R. Jahns, p. 27.)

Eyster, George, Sharon Moore and Charles J. Bailey. Final Report: Appalachian Community Based Right to Read Programs. Morehead State University, Appalachian Adult Education Center, Morehead, Kentucky, August, 1975.

This is the final report of the Appalachian Adult Education Center (AAEC) Right to Read Community Based Project, sponsored by Morehead State University, Morehead, Kentucky. Classes were held at five sites, three rural and two urban, in Kentucky and Ohio and in the homes of disadvantaged adults. In addition to the five project directors, 11 paid, indigenous paraprofessionals served as home instructors, making 1-2 visits per week. Special collections of AAEC life/job coping skills materials, local learning center resources and public libraries were used. The median age of the 429 enrollees included in the data analysis was 28.6 years; median grade completed was 8.9. About one-fourth were male, three-fourths female. Using the Test of Adult Basic Education (TABE), the following achievement gains were recorded for 178 of the students after a mean of 5.4 months of instruction:

Area	Mean Years and Months
Reading	1.3
Math	1.4
Language	1.1
TOTAL	1.3

The cost per student was $220, including salaries, travel and materials.

Frazier, William Donald. A Comparative Study of Some Effects of Vocational Education on Culturally Disadvantaged Youth. Ed.D. Dissertation, Oklahoma State University, 1966.

This study evaluates a MDTA program by comparing the results of the program with the results of a more traditional high school vocational program in Oklahoma City. The MDTA program delineated three treatment groups: (a) those trainees receiving both vocational and academic courses for eight hours daily; (b) those trainees receiving vocational courses only for five hours daily; (c) those trainees receiving academic courses only for three hours daily. A comparison of the training results of these MDTA participants and the high school vocational students (using the General Aptitude Test Battery, Sequential Tests of Educational Progress and Life Adjustment, as well as personality tests) showed the following:

Sequential Tests of Educational Progress

Test	Sample	Mean
Reading	High School	45.7348
	MDTA	47.6656
	High School	47.1878
	MDTA Combination (Vocational and Academic)	50.9416
	High School	44.9360
	MDTA (Vocational Only)	44.6529
Writing	High School	33.7916
	MDTA	36.4842
	High School	35.1615
	MDTA Combination (Vocational and Academic)	38.5909
	High School	32.3514
	MDTA (Vocational Only)	35.7610

(continued)

Test	Sample	Mean
Social Studies	High School	42.3956
	MDTA	43.3183
	High School	43.5841
	MDTA Combination (Vocational and Academic)	45.9643
	High School	41.4700
	MDTA (Vocational Only)	41.3636
Math	High School	25.0556
	MDTA	27.3520
	High School	26.1363
	MDTA Combination (Vocational and Academic)	29.2934
	High School	24.7854
	MDTA (Vocational Only)	25.7824
Science	High School	31.1188
	MDTA	32.8617
	High School	31.7658
	MDTA Combination (Vocational and Academic)	34.7313
	High School	30.5020
	MDTA (Vocational Only)	31.5506

Thus, the combined MDTA group had higher means on all tests and their program appeared to be the most effective in terms of academic achievement.

Frost, Joe L. and Geneva H. Pilgrim. Reading Achievement of Gary Job Corps Youth Enrolled in a Diagnostically Based Program. Gary Job Corps Center, San Marcos, Texas, 1969.

This program, designed for disadvantaged male school dropouts, ages 16-21, at the Gary Job Corps Center in San Marcos, Texas, attempted to raise the reading levels of those trainees who scored below a sixth grade reading level on the Stanford Achievement Test. After referral to the Reading Center, students were retested on the Gates-MacGinitie Test for placement purposes. The subjects enrolled in the program, which used a variety of instructional materials during 1967, showed the following changes in mean grade level scores:

Gates Test	Pre-Test (Mean Grade Level Equivalent)	Average Period of Instruction (Months)	Post-Test (Mean Grade Level) Equivalent)
Vocabulary (N=382)	4.1	3.9	5.0
Reading Comprehension (N=380)	4.2	3.9	5.6

The subjects enrolled in the program during 1968 showed the following changes in mean grade level scores:

	Pre-Test (Mean Grade Level Equivalent)	Average Period of Instruction (Months)	Post-Test (Mean Grade Level Equivalent)
Vocabulary (N=156)	4.7	1.7	5.8
Reading Comprehension (N=156)	4.4	1.7	5.9

George, John E. and Linda S. Prugh. Tutor-Student System Dropout Prevention Model. University of Missouri-Kansas City, n.d.

This is a description of the implementation and testing of one model program of dealing with illiteracy at the high school level. Intensive, highly structured, one-to-one tutoring by nine 11th and 12th grade students and nine university students, using the Tutor-Student System in Beginning Reading, was the basis of the program. Thirty-six students in grades 10 and 11 at Paseo High School in Kansas City, Missouri, were identified (using the Stanford Diagnostic Test and the Gilmore Oral Reading Test) as reading below the 4.0 grade level. Eighteen were randomly assigned to the experimental group to receive daily, one-hour tutoring for ten weeks; the remaining 18 students formed the control group, which received regular instruction in English or reading classes. The research data summary showed the following results:

Gilmore Oral Reading Test

	Experimental Group		
Test	Pre-Test	Post-Test	Gain
Reading Comprehension Grade Level Score	2.8	5.3	+2.5
Reading Accuracy Grade Level Score	3.3	4.6	+1.3
	Control Group		
	Pre-Test	Post-Test	Gain
Reading Comprehension Grade Level Score	2.8	3.5	+ .7
Reading Accuracy Grade Level Score	3.0	2.9	-.1

The overall conclusions were (1) that the program, as designed, produced statistically significant gains in reading achievement for those reading below a 4.0 level, and (2) that university and high school tutors can produce rapid improvement in reading for potential dropouts when using the Tutor-Student System in Beginning Reading in the manner suggested.

George Washington University, Social Research Group. A Study of the Effectiveness of Selected Out-of-School Neighborhood Youth Corps Programs. Washington, D. C., April, 1971.

This paper reports the results of a NYC study, based on program-sourced information and second-round follow-up interviews with study subjects. The primary hypothesis that NYC programs had helped enrollees achieve satisfactory adjustment to life and the world of work was not confirmed and an early conclusion that the NYC seemed to be most effective with Negro women was not supported by later data. Although there was no clear evidence that the NYC effectively enhanced the employability of the average enrollee, there was evidence that some program components were having a significant effect. Formal skill training, work sites with training and employment opportunities, job development, and job placement assistance appeared to be associated with increased post NYC employment. Some other major findings: (1) the NYC is reaching seriously disadvantaged youth with major employability problems; (2) enrollees, on the whole, gave a good report of the usefulness of the NYC program and the helpfulness of work supervisors and counselors; (3) the attitudes of enrollees are associated with their employability.

George Washington University, Social Research Group. The Accelerated Learning Experiment: An Approach to the Remedial Education of Out-of-School Youth. Final Report. Washington, D. C., November, 1972.

This document reports the results of the experimental use of new remedial education techniques (Accelerated Learning Experiment--ALE) in three NYC out-of-school programs, one each in St. Louis, Cincinnati and Pittsburgh. Study groups of 50 each were set up and during a 15-month period, over 300 enrollees participated, with useable evaluative data on 277. Educational materials included those developed for the Job Corps Conservation Centers, as well as GED materials. The California Achievement Test (CAT) was administered to enrollees upon entering the experiment, at the end of three months, at the end of six months and thereafter at six-month intervals. Among the results:

% Outcomes in the ALE

Outcomes	Male (N=130) (%)	Female (N=147) (%)	Total (277) (%)
Academic Achievement			
Outstanding Progress	2	6	4
Moderate Progress	3	9	6
Minimal Progress	6	8	7
Progress, then lost interest	6	5	5
Attitudinal Achievement			
Good, in ALE 6 months or more	9	8	8
Good, in ALE less than 3 mos.	18	21	20
Good, then lost interest	3	8	6
No Progress			
In ALE 2-6 months	27	20	23
In ALE less than 2 months	28	14	21

Variations in ALE outcomes by site were as follow:

ALE % Outcomes by Site and Sex of Subject

Outcomes	Cincinnati		Pittsburgh		St. Louis	
	Male (N=74) (%)	Female (N=48) (%)	Male (N=36) (%)	Female (N=30) (%)	Male (N=20) (%)	Female (N=69) (%)
Made Progress in Remedial Education						
Evidenced by Test Results	14	27	0	35	16	16
Evidenced by Attitude Reports	30	21	14	21	37	38
Made Progress and Then Lost Interest	10	19	3	3	16	14
Made No Discernible Progress	47	33	83	41	32	32

Ghan, Bill and Donald W. Mocker. Everyone Has the Right to Read. Jefferson City: Missouri State Department of Education, 1970.

This document includes five papers on teaching reading skills to illiterate adults: (1) the stages of development in acquiring reading skills; (2) studies of several literacy programs; (3) a determination of reading levels and the problems of testing; (4) an adult education approach to reading instruction; (5) the selection and use of adult reading materials. The authors make six summary statements: (1) most illiterate adults can make substantial progress towards functional literacy if at least minimal procedures and adequate time and moderate interest are available; (2) adults with low levels of literacy

tend to have reading proficiency that is two or three years below their grade level at school learning; (3) there are few tests that have been developed or adapted for use with illiterate adults. The lack of tests or norms for adults with low literacy that can be used for diagnosis, assessing ability and criterion measures regarding achievement is a major restriction on both program effectiveness and research; (4) in spite of recently published materials, there is still a lack of appropriate materials for ABE which have high interest levels but low reading difficulty levels; (5) there is little evidence of the relative effectiveness for various purposes of the various instructional systems that have been developed for ABE; (6) when teachers carefully follow an instructional system, there is little evidence that levels of teachers education are associated with learner progress.

Goldberg, Samuel. Army Training of Illiterates in World War II. New York: Columbia University, Teachers College, Bureau of Publications, 1951.

The Army program, designed for illiterate, non-English speaking and Category V men (those testing below the tenth percentile on the Armed Forces Qualification Test), was officially in operation from mid-1941 through 1945. Of the participants initially reading at the first grade level, 61.6% were taught to read at the fourth grade level in 12-16 weeks. Those who initially placed at higher achievement levels made even more rapid progress. Special features that appeared to have had a significant effect on the success of the program include: (1) strong incentives to learn: the need to read letters from home and to write letters home; (2) complete and continuous Army control over participants; (3) the unlimited funds of the military establishment; (4) the availability of qualified instructors and supervisory personnel; (5) as a new venture for the Army, there was no need to struggle with precedents; (6) only those men with sufficient mental capacity to benefit from literacy training were accepted and those who did not progress satisfactorily were honorably discharged from the service; (7) special instructional materials and training aids were developed specifically for the program and counseling was provided; (8) the pupil-instructor ratio was 15 to 1 in the academic classes; (9) the training was systematically appraised through a monthly reporting system and continuous in-service training of instructors and supervisors was provided; (10) the goal was achievement at the fourth grade level, a goal which would be unrealistically low for civilian ABE programs. However, the Army had no follow-up program and long-range effects could, therefore, not be determined.

Gordon, Edmund and others. Independent Evaluation of the Adult Basic Education Career Development Center in the Newark Model Cities Area. New York: Columbia University, Teachers College, January, 1974.

This document is an evaluation of the Newark Construction Trade Training Corporation (NCTTC) program to recruit minority members of the Newark Model Cities area into a construction trade training program and to provide them with the academic and vocational skills necessary to pass entrance tests or to perform routine work requirements. The California Achievement Tests were administered upon entry into the ABE program; Essex County College textbooks

and a language lab made up the major instructional curriculum, which continued until the student felt he could pass the High School Equivalency Examination (GED). Results of student achievement on the CAT test of adult basic education were as follow:

	N	Math	N	Reading
Pre-Test Means	18	6.9	25	6.6
Post-Test Means	18	7.8	25	7.8
Difference		.9		1.2

The students' attitudes toward the ABE component were generally favorable.

Gran, James R. Sixth Teacher Evaluation and Pre-Post Test Results of the Jackson County (Iowa) Adult Evening High School Completion Program for the Semester Ending December 18, 1968.

The test results for 30 adult classes, at the end of the 1968 fall semester (after approximately three months of instruction), were as follow:

Subject	Test	Pre-Test Mean	Post-Test Mean	Avg. Gain or Loss
Bookkeeping	Teacher-Made	72.4	94.5	+22.14
English 10	Stanford Achievement-Spelling	10.4	10.7	+ .26
English 10	Stanford Achievement-Language	8.5	9.2	+ .7[illegible]
English 10	Stanford Achievement-Spelling	8.0	10.2	+ 1.93
English 10	Stanford Achievement-Language	7.5	9.7	+ 2.25
English 10	Stanford Achievement-Spelling	7.8	11.1	+ 3.23
English 10	Stanford Achievement-Language	6.8	8.8	+ 2.03
English 11	Stanford Achievement-Spelling	9.4	10.1	+ .65
English 11	Stanford Achievement-Language	7.9	9.4	+ 1.53
English 11	Stanford Achievement-Spelling	9.6	10.2	+ .54
English 11	Stanford Achievement-Language	9.0	9.3	+ .32
English 11	Stanford Achievement-Spelling	9.9	10.7	+ .78
English 11	Stanford Achievement-Language	9.0	9.5	+ .4
Government	Textbook-Ginn	9.6	32.8	+23.
Government	Textbook-Magruder	67.6	107.2	+39.6
Government	Textbook-Magruder	79	101.1	+22.1
American History	Crary A. H. Test	23	34	+10.9
American History	Crary A. H. Test	25	41	+16
American History	Crary A. H. Test	32	46	+14
Math	Stanford Achievement-Test I	7.7	10.2	+ 2.54
Math	Stanford Achievement-Test II	8.2	10.5	+ 2.40
Math	Stanford Achievement-Test III	9.3	11.0	+ 1.75
Math	Stanford Achievement-Test I	7.2	9.2	+ 2.

(continued)

Subject	Test	Pre-Test Mean	Post-Test Mean	Avg. Gain or Loss
Math	Stanford Achievement-Test II	7.6	9.4	+ 1.76
Math	Stanford Achievement-Test III	9.65	9.65	0
Math	Stanford Achievement-Test I	7.45	9.7	+ 2.5
Math	Stanford Achievement-Test II	7.25	9.22	+ 1.96
Math	Stanford Achievement-Test III	9.16	10.04	+ .87
Science	Teacher-Made	38.2	53	+14.7
Science	Stanford Achievement	10.06	11.03	+ .97

This test evidence seems to support the contention that adults learn more in a shorter period of time than do regular high school students.

Gran, James R. Eighth Teacher Evaluation and Pre-Post Test Results of the Jackson County (Iowa) Adult Evening High School Completion Program for the Semester Ending December 17, 1969.

Twenty (of 30) adult evening GED classes completing pre-post testing showed the following gains in mean scores:

Course	Possible Mean Score		Pre-Mean Score	Post-Mean Score
American Government (Magruder)	150		81.7	112.8
American Government (Stanford)	12.9		9.1	9.1
American Government (Social Studies)	9		6.6	8.0
American History (Crary)	99		34	63
English 10 (Stanford)	12.9	Spelling	6.6	9.35
		Language	7.15	10.4
English 10 (Stanford)	12.9	Spelling	9.8	10.5
		Language	6.9	9.0
English 10 (Stanford)	12.9	Spelling	8.2	9.8
		Language	7.1	8.4
English 10 (Stanford)	12.9	Spelling	10.3	10.9
		Language	9.2	10.7
English 11 (Stanford)	12.9	Spelling	9.4	10.6
		Language	9.2	8.7

(continued)

Course	Possible Mean Score		Pre-Mean Score	Post-Mean Score
English 11 (Stanford)	12.9	Spelling	9.2	9.7
		Language	7.3	8.6
English 11 (Stanford)	12.9	Spelling	9.1	11.0
		Language	9.3	10.7
Math (Stanford)	12.9		9.8	11.3
Math (Stanford)	12.9		8.9	9.9
Math (Stanford)	12.9		9.5	11.1
Science (Stanford)	12.9		10.1	10.8
Science (Stanford)	12.9		8.3	10.4
Science (Teacher Made)	100%		12.5%	62.3%
Home Economics (Teacher Made)	103		71	86

Perhaps the actual learning taking place was even higher than the tests indicate, since many standardized tests are not designed for the subject matter being taught and none have been designed or standardized for adults.

Greenleigh Associates, Inc. Participants in the Field Test of Four Adult Basic Education Systems: A Follow-Up Study. New York, January, 1968.

A field test (March, 1965 - May, 1966) conducted in three states (California, New Jersey, New York) of 1,620 (540 in each state) functionally illiterate screened welfare recipients placed in 108 classes (36 in each state) on a random basis used four different education systems and three levels of teacher-preparation: experienced, certified teachers, college graduates without teacher training or experience, and high school graduates. Enrollees were divided into three groups: Group 1 participated in 17 weeks of field test basic education classes; Group 2 did not participate; Group 3 were overqualified as having scored above 4.9 on the Gray Oral Reading Paragraphs test. The four systems of instruction used were: (1) American Incentive to Read (AIR); (2) Science Research Associates, Reading in High Gear (SRA); (3) Mott's Basic Language Skills Program (MOTT); and (4) Follett's Systems for Success (FOLLETT). Results:

Mean Reading Scores	Group 1	Group 2	Group 3
At Screening	2.895	2.896	8.041
After 12 Months	4.001	3.966	8.362
After 18 Months	3.979	4.114	8.249

No one level of teacher preparation or any given reading system was more effective.

Conclusions: (1) the field test was not decisive in increasing reading levels; (2) the Gray Oral Reading Paragraphs test may not be valid for the disadvantaged; (3) other factors--self-improvement, employment, exposure to other media of learning--are instruments in improving reading ability. Although 127 (15% of the participants) gained an eighth grade reading level, a majority did not retain the level of reading skill obtained at the end of the field test. Unless positive action is taken to continue education, short-run exposure to education appears to be of little value.

Human Factors Research Laboratory. Report of External Evaluation Team for Project RFD. Colorado State University, Fort Collins, July, 1972.

This is an external evaluation by a Colorado State University team of Project RFD, an adult basic education project operated at the University of Wisconsin Extension in Madison. The project proposed to deliver educational opportunity to the undereducated rural adult and to demonstrate and test materials designed to provide educative experiences for the participants, utilizing educational TV, individualized home study instruction techniques and a personalized home contact instruction and evaluation plan for a period of 20 weeks. The Psychometric Laboratory of the University of Wisconsin, School of Education, concerned with the internal evaluation of the project, tested 100 subjects (50 in the experimental group received the home visitor component; 50 in the control group did not) in communication skills, computational skills and coping skills. The results indicated no significant differences between the experimental and control groups; a follow-up interview six months after the demonstration found no differences between the groups.

Ikenberry, Stanley O., Eddie C. Kennedy and Juanita V. Field. Effects of Reading, Study Skills Improvement, and Reduced Credit Load on Achievement and Persistence of Failure Prone College Freshmen: A Pilot Study. West Virginia University, Morgantown, November, 1966.

This report covers the investigation of the effect of training in reading-study skills and reduction of the academic credit load on the probability of academic success and the reduction of withdrawal rates for marginal college students. Subjects were 330 students, selected from the 1964-65 freshman class of West Virginia University, who had a predicted grade point average of 1.99 and below on a 4.0 scale. Subjects were randomly assigned to four groups: (1) a reading-study skills class with reduced credit load; (2) a reading-study skills class with no reduction in credit load; (3) a reduced load with no special class; (4) a control group with no special class and no reduction in credit load. At the close of the first semester each of the criterion measures (grade point averages, standard scores, withdrawal rate per semester) showed a significant difference in favor of those groups taking the course. Significant interaction effects between the special course and the reduced load treatment were also shown. The group with only the reduced load treatment achieved at a level below the other three groups and had the highest rate of withdrawals. Apparently, a reduced or controlled credit load, when not combined with other positive remedial effects, may have a negative influence on student achievement.

These results were not in evidence by the close of the sophomore year, however, casting doubt on the long-term effectiveness of such measures.

Information and Training Services and U. S. Office of Education. "Educationally Deficient Adults," in Basic Education for the Disadvantaged Adult: Theory and Practice. Frank W. Lanning and Wesley A. Many (Eds.). Boston: Houghton Mifflin Company, 1966.

This article surveys three selected adult basic education programs; complete final data were available for only one, the Armstrong project. This Washington, D. C. project involved the training of service maintenance workers, providing them with essential education in reading, computation, and writing, and in vocational training to enable men to enter building maintenance and women to enter charwoman and chambermaid occupations. Begun in March, 1963 (at which time the District of Columbia Employment Service estimated a demand for 750 such workers), the Employment Service, with the cooperation of the Armstrong Adult Education Center, set up the project to last 52 weeks, 6 hours per day, 5 days per week. Twenty-eight male and 26 female trainees were enrolled; average age was 41.5 years; 50 were Negroes; average educational background was grade 4.6, but average reading level was 1.4. Classes included 780 hours of reading, computation, and writing; 700 hours of service maintenance training; and 80 hours of testing and counseling. Final reports showed that 19 trainees completed the program; 24 accepted employment before finishing; 3 were seeking employment; 4 dropped out of the program; 2 were terminated; and 2 transferred to other projects. Tests given in December, 1963, showed an average reading grade level of 2.7--a gain of 1.3 grades. The trainees indicated that they enjoyed the project and felt it very worthwhile.

Instructional Dynamics, Inc. Initial Evaluation of Operation Wordpower. Chicago, Illinois, May, 1970.

This reading program for 372 disadvantaged adults in 4 Chicago centers consisted of instruction with Sullivan Reading Materials updated to the Edison Talking Typewriter until the student reached a sixth grade reading level. Participants spent 20 minutes per day in the booth, 20 minutes per day in the study area. Ninety-three students were evaluated by means of the Stanford Achievement Test (SAT), the Sullivan Placement Test (SPT) and Progress in the Sullivan Program (PSP). After approximately 20 hours in the program, students had gained .982 mean grade level years in word recognition, .951 mean grade level years in paragraph meaning on the SAT. The number of hours required to achieve a 2-grade level improvement on the SAT was 54.4; on the SPT, 29.8; on the PSP, 25.1.

Jahns, Irwin R. Teacher-Student Relationships: A Report of Adult Basic Education Research Conducted at the Florida State University. Tallahassee: Florida State University, 1969.

This paper describes three studies concerned with ABE programs. (1) Weldon Bradtmueller's Florida ABE Migrant and Seasonal Workers Project: this 14-week, 420 hour (210 hours of basic education, 210 of pre-vocational) summer migrant ABE program resulted in an average .58 grade level gain, the largest in reading comprehension (two-thirds year), the smallest in vocational achievement (one-third year). Arithmetic gains averaged better than five months growth in 14 weeks. The lower pre-test scorers made the greatest gains. (2) George F. Aker and Irwin R. Jahns' OEO-Funded Seasonal Farm Worker Program in a Southern State: the average pre-test grade level of 2.6 compares with an average post-test grade level of 4.9 in this OEO stipend-funded seasonal farm workers program. Again, the lower pre-test scorers made the greatest gains. (3) David Endwright's Report to the Director of the Florida Division of Corrections on the Prisoners' Volunteer Full-Time ABE Program using inmate instructors: the average grade level gain for 166 participants was 1.5 every 7½ months. Intermediate students (pre-test grade level scores of 4.0-7.9) made faster gains than primary level students (pre-test grade level scores of 0.0-3.9); advanced level students (pre-test grade level scores of 8.0-12.0) made the greatest gains, 2.6 grade levels every 7 months. (See Weldon Bradtmueller, p. 5; George F. Aker, p. 3; and David Endwright, p. 15.)

Jones, Bert and others. A Study of Remedial Reading Programs in the Omaha and Marquette Job Corps Centers for Women. Burroughs Corporation, Detroit, Michigan and Northern Michigan University, Marquette, 1969.

This investigation of the Omaha Job Corps Center for Women and the Marquette Job Corps Center for Women was designed to assess the characteristics of the remedial reading program and to provide Job Corps norms for the Gates-MacGinitie Reading Test. Two groups of enrollees were designated at each center; the experimental group of 180 received 40 hours of reading instruction, the control group of 37 received no formalized reading instruction. Both Centers used a combination of visual, audio and kinesthetic techniques and individualized instruction. The following tables show the statistical results:

Omaha Center Pre-Test-Post-Test Differences

Group	N	Means	
		Vocabulary	Comprehension
4th Grade, 9th Month and Below			
Experimental Pre-Test	15	9.87	15.60
Experimental Post-Test	15	12.67	19.27
5th Grade and Above			
Experimental Pre-Test	20	17.70	32.45
Experimental Post-Test	20	19.90	31.30
4th Grade, 9th Month and Below			
Control Pre-Test	8	11.63	17.38
Control Post-Test	8	13.13	17.00

(continued)

Omaha Center Pre-Test-Post-Test Differences (continued)

Group	N	Means Vocabulary	Means Comprehension
5th Grade and Above			
Control Pre-Test	7	17.00	33.29
Control Post-Test	7	17.57	32.42

Marquette Center Pre-Test-Post-Test Differences

Group	N	Means Vocabulary	Means Comprehension
4th Grade, 9th Month and Below			
Experimental Pre-Test	24	11.92	14.25
Experimental Post-Test	24	15.92	19.79
5th Grade and Above			
Experimental Pre-Test	21	17.86	28.61
Experimental Post-Test	21	19.90	26.76
4th Grade, 9th Month and Below			
Control Pre-Test	10	10.20	16.50
Control Post-Test	10	14.40	16.80
5th Grade and Above			
Control Pre-Test	12	19.75	29.92
Control Post-Test	12	21.17	31.58

The reading programs at both centers were thus of greatest benefit to those who read below the 4th grade, 9th month level.

Jones, Merritt B. A Speech Improvement Program for College-Bound Negro Students. Final Report. Washington: National Center for Educational Research and Development (DHEW/OE), December, 1971.

The purpose of this study was to devise a feasible and effective program of speech retraining for the college-bound Negro student. The subjects, attending the Upward Bound program at the University of South Florida during the summer of 1971, were tape recorded reading and speaking freely. Following analysis by the instructional staff, students met with the four instructors for 2-hour sessions, 2 days per week for 8 weeks. At the conclusion of the 8 weeks, each student's speech was again tape recorded and analyzed. The 14 students showed a mean of 3.07 points of improvement when rated by the staff.

Kent, M. R. and F. J. Dockrill. Teaching Reading and Comprehension Skills to Sub-Literate Adults. Department of Health, Education and Welfare, n.d.

This document reports experimental research conducted on Cape Breton Island on two equally matched classes of 20 adult students, each referred for training by the Canada Manpower Centers, and measures the gains in literacy achievement resulting from two different methods of lesson presentations over an average of 265 hours of instruction. The experimental group was taught using a multimedia, multimodal and multilevel communications skill system, Learning 100 (L-100); the control group was taught in a traditional manner using standard reading texts. The easy level of the Test of Adult Basic Education was administered to both groups prior to the beginning of the program and following its completion. The results were as follow:

Mean Pre- and Post-Test Scores

	Experimental	Control
Pre-Test	53.10	55.15
Post-Test	72.20	60.60
Difference	19.10	5.45

The experimental group thus showed a significantly greater gain in reading and comprehension skills than the control group.

Kent, William P. A Longitudinal Evaluation of the Adult Basic Education Program. System Development Corporation, Falls Church, Virginia, November, 1973.

This report, the first nationwide evaluation of Adult Basic Education (ABE) programs, studied the effects of the ABE program on approximately 280,000 adults from 18 to 44 years of age with less than eight years of schooling. The sample investigated included 2,300 students in 200 classes, 90 programs and 15 states; they were tested twice (at four-month intervals) with portions of the Tests of Adult Basic Education (TABE) and interviewed three times (at intervals of 12 and 18 months after initial interviews). The classes, usually meeting in school buildings two evenings a week for three hours from September through May, offered instruction at many different levels, from beginning reading to high school subjects. Over one-fourth of the students gained a full grade or more in reading achievement during the four months between tests; nearly one-fifth gained a full grade or more in mathematics achievement. On the other hand, approximately one-third made no gain at all or even lost ground during the four-month interval. Gains between tests were highest for students with the lowest initial scores (.8 grades in both reading and mathematics for those with initial scores below the fifth grade). A comparison with MDTA students enrolled in basic education classes showed that MDTA enrollees attained an average reading gain of .4 grades after 54 hours of instruction, while ABE students showed an average reading gain of .5 grades

after 98 hours of instruction. The ABE students interviewed from 1971 to 1973 steadily increased their employment and earnings; these students appeared well-satisfied with their ABE experiences and most gave ABE at least some credit for job and wage improvement. Cost data showed a mean annual expenditure of about $4,000 per ABE class per year or about $250 per enrollee. The following table shows the average reading and mathematics gains by initial test levels.

Initial Reading Level	Average Reading Gain
Below 5th Grade	0.8
5th or 6th Grade	0.3
7th Grade or Above	0.0

Initial Mathematics Level	Average Mathematics Gain
Below 5th Grade	0.8
5th or 6th Grade	0.3
7th Grade or Above	0.1

* Kling, Martin. Reading and Basic Subject Matter Achievement of Job Corps Urban Center Trainees. Paper delivered to the 16th annual meeting of the National Reading Conference, St. Petersburg, Florida, December, 1966.

This study describes and evaluates the educational achievement of 394 Job Corps trainees at Camp Kilmer, New Jersey over a three-month period--three hours a day, five days a week, were devoted specifically to academic subjects. The complete battery of the junior high level, California Achievement Tests, was administered in March and again in July, 1966, with the following changes noted:

	Pre-Test Mean (N=394)	Post-Test Mean
Reading Vocabulary	6.9	7.1
Reading Comprehension	7.6	7.7
Arithmetic Reasoning	7.7	7.8
Arithmetic Fundamentals	7.5	7.7
Mechanics of English	6.7	6.9
Spelling	7.3	7.3

The fact that there were no statistically significant differences in reading, arithmetic and language achievement for these trainees implies, the author states, that 19 years, the mean age of the 394 Job Corpsmen, may be too old for compensatory intervention and that basic subject matter areas may have been perceived by the trainees as incidental to vocational training.

* Lopez, John K. The Mexican-American Curriculum Study. Report of a Coupled Basic Education-On-the-Job Training Program for Monolingual Mexican-Americans. California State Department of Education, Sacramento, and Bureau of Industrial Education, California University, Los Angeles, Division of Vocational Education, 1968.

This program was designed to provide coordinated, coupled pre-vocational education, using ESL materials and on-the-job training opportunities for disadvantaged Mexican-American heads of households and was made up of 300 hours of basic education in language and communication, 200 hours of mathematics skills, 100 hours of job communication skills, 100 hours of pre-vocational training and 100 hours of counseling and guidance. A pre-test mean of 36.68 on the California Achievement Test-Reading was raised to a post-test mean of 54.91 for 34 students; a pre-test mean of 155.47 on the California Achievement Test-Arithmetic was raised to a post-test mean of 166 for 34 students; in language, the pre-post test means were 26.00 and 39.85, and for the total battery the change was from a pre-test mean of 218.15 to a post-test mean of 260.76 after approximately 16 weeks of instructional time.

Pre- and Post-Test Grade Level Mean Scores on California Achievement Test for 34 Students After 16 Weeks of Instruction

	Pre-Test	Post-Test
Reading Vocabulary	2.8	3.4
Reading Comprehension	2.2	2.9
Total Reading	2.4	3.1
Arithmetic Reasoning	3.5	3.8
Arithmetic Fundamentals	3.8	3.9
Total Arithmetic	4.2	4.3
Mechanics of English	2.5	3.4
Spelling	2.4	3.3
Total Language	2.5	3.2
Total Battery	3.4	3.7

* Louisiana State Department of Education. End-of-the-Year Narrative Annual Report for Adult Education Programs, Publication No. 1433, 1974.

This is an annual report of the 66 local Louisiana school systems operating adult education programs (for 216 hours of instruction over 36 weeks). During fiscal year 1974, emphasis was placed on publicity and promotion, recruitment, the development of full-time learning centers and/or mini-centers, individualized instruction, evaluation of local programs, the development of career education, education in correctional institutions and for other special needs groups, extensive staff development programs, the establishment of state and local advisory councils and

the recruitment of local community leaders in organization of volunteer programs and the use of special techniques for teaching reading to illiterate adults. Total enrollment was 14,948 (5,196 males, 9,752 females; nearly twice as many whites as blacks) with an average age of 27.4 years. Pre-tests on the California Achievement Test showed a 9.9 average grade level; post-tests, an 11.6 average grade level, representing a 1.7 average grade level achievement after an average of 69.2 class hours. Although nearly 6,000 dropped out of the program during FY 1973-74, 5,945 students were recommended for GED and 2,031 were issued upgrade certificates.

* Mangano, Joseph. "Head Start Parents' Adult Basic Education Project, New York City." In William S. Griffith and Ann P. Hayes (Eds.), Adult Basic Education: The State of the Art. University of Chicago, Department of Education, March, 1970.

This basic education project in New York City, in July and August of 1967, consisted of 90 classes scheduled for 100 hours of basic education instruction for undereducated parents of children who were enrolled in the Head Start Children's Program. One thousand four hundred forty-eight students registered; 90 teachers, 10 guidance counselors and 10 teachers-in-charge were responsible for the instruction at 10 centers. Basic education instruction was individualized; reading was taught through interrelated communication skills. The guidance program stressed the helping of the parent to help the child. Three parent workshops of four sessions were devoted to disciplining, developing self-confidence in, and responsibility in and understanding one's children. The curriculum provided for approximately two hours a day, for a total of 60 hours, of instruction in language arts and for one hour a day, for a total of 30 hours, of instruction in mathematics. Academic achievement was measured by the ABLE (Adult Basic Learning Examination) which assessed vocabulary, reading, arithmetic computation, and problem solving. Pre-post-test scores showed the following mean gains in grade equivalency:

Vocabulary	1.2 years
Reading	1.4 years
Arithmetic Computation	1.2 years
Problem Solving	1.3 years

Questionnaires revealed (1) that practically every student had a positive attitude toward the classes; (2) that the children of the students showed improved adjustment in their Head Start classes; (3) the teachers, for the most part, rated the key aspects of the program as either excellent or good.

Mangum, Garth L. and R. Thayer Robson (Eds.). Metropolitan Impact of Manpower Programs: A Four-City Comparison. Salt Lake City, Utah: Olympus Publishing Company, 1973.

This evaluative study of 1,709 enrollees in manpower programs in Boston, Denver, San Francisco and the Oakland Bay area maintained that "the only real justification for the existence of manpower programs is the extent to which they improve the employment and earnings experience of the enrollees." It found that across all cities and programs, and despite unfavorable economic conditions, the average enrollee was substantially better off in terms of employment stability and earnings because of his program participation. While skills training paid off better than nonskills training (basic education and language training), the latter alone also had significant positive employment and earnings impacts, and some of the language training brought spectacular results as it freed technically skilled immigrants from their communications handicaps. On the average across the four cities, mean hourly wage rates rose by $.50; employment stability improved by 9%. Seven out of ten enrollees felt positive in regard to the training received and nine out of ten expressed overwhelmingly favorable attitudes toward their teachers.

Mangum, Garth. "MDTA: A Decade of Achievement." In Seymour L. Wolfbein (Ed.), Manpower Policy: Perspective and Prospects. Philadelphia: Temple University, School of Business Administration, 1973.

One million seven hundred thousand enrollees participated in MDTA programs between March 15, 1962 and June 30, 1971, representing a total federal obligation of $2.4 billion. Of these, 1.1 million completed training and 879,000 obtained post-training employment. A survey of 5,169 (of a total of 220,000) enrollees in 1969 found annual income gains of participants averaged more than $1,800 for institutional trainees, over $1,600 for on-the-job trainees. Income gains of disadvantaged enrollees averaged more than double those of the non-disadvantaged, yet the income climb was merely from deep poverty to its upper margins. Completers experienced about three times the annual income increase of those who dropped out, but even the latter profited substantially. Estimated costs for institutional trainees: $1,383 per enrollee, $2,470 per completer, $3,323 per placement; costs for on-the-job trainees: $801 per enrollee, $1,129 per completer, $1,310 per placement. The relative income gain for disadvantaged enrollees in institutional training was $1,210; for disadvantaged enrollees in on-the-job training, $1,413.

* Manpower Administration, Department of Labor. Industrial Manpower Center, the First Year. Report on an Experimental and Demonstration Program. Washington, D. C., n.d.

This is a report of the first year's operation of a major job-readiness and job placement program in the Pittsburg-Antioch urban fringe area near San Francisco Bay. Trainees received three hours of basic education training and three hours of human resources development life-skills training daily, five days a week. The LEARN education system was employed during the first

ten weeks, a mixture of MIND and Contractor-developed learning materials was used through the other two ten week cycles. The Stanford Intermediate Test was administered when the trainees enrolled and during the tenth week of training. The results were as follow:

	Educational Improvement	
No. Graduates Improving	Verbal	Numeric
Less than 1 grade level	114	80
1 - 1.9 grade levels	93	83
2 - 2.9 grade levels	36	52
3 - 3.9 grade levels	7	19
4 - 4.9 grade levels	2	6
5 and over	0	2
Not tested	108	108

Educational Improvement

	Average Pre-Test Grade Level			Average Post-Test Grade Level			Average Change In Grade Level		
	Cycle 1	Cycle 2	Cycle 3	Cycle 1	Cycle 2	Cycle 3	Cycle 1	Cycle 2	Cycle 3
Word Meaning	6.8	6.9	6.5	7.4	8.1	8.3	.6	1.2	1.8
Paragraph Meaning	6.2	6.6	6.2	7.1	7.9	7.2	.9	1.3	1.0
Arithmetic Computation	5.6	5.8	5.9	7.0	7.4	7.4	1.4	1.6	1.5
Arithmetic Applications	6.7	7.3	7.0	7.2	8.4	8.6	.5	1.1	1.6

* Manpower Administration, Department of Labor, Training and Employment Service. Effect of Basic Literacy Training on Test Scores. Washington, D. C., September, 1969.

This study investigated changes in test performance of disadvantaged adults as a result of literacy training. Standardized (SAT and MAT) Achievement tests of vocabulary, reading, comprehension, arithmetic computation and arithmetic reasoning were administered in 16 states; the General Aptitude Test Battery (GATB) was also administered. After a mean of 208 hours of training (20.2 hours per week for 10.9 weeks), the following results were obtained:

Pre-Post-Test Grade Score Means (N=377)

Achievement Score	Reading	Arithmetic	Total
Pre-Test	63.3	59.5	61.5
Post-Test	71.3	68.8	70.1
Difference	8.0	9.3	8.6

It was also found that initial reading achievement, minority group status, GATB aptitudes and nonreading test performance predicted arithmetic improvement, while in general these same variables were not as predictive of reading achievement improvement.

McGoff, R. Mark and Frances D. Harding. A Report on Literacy Training Programs in the Armed Forces. International Training Consultants, Inc., Burbank California, Air Force Human Resources Laboratory, Manpower Development Branch, Alexandria, Virginia, April, 1974.

This report describes the status of literacy training programs in the military services during the summer of 1971 and the wide diversity in methods and effectiveness of the various programs. The objectives of the programs were as follow: (1) for the Air Force, a 6th grade reading level; (2) for the Army, a 5th grade reading level, in addition to instruction in arithmetic and social studies; (3) for the Navy, a reading level of 4.5 to 5.0. A variety of instructional materials were employed, most frequently the Reader's Digest Skill Builders and the Science Research Associates' Reading Laboratory, as well as a variety of audio-visual equipment. The Air Force course is 13 weeks, 65 days, 260 hours; the Army program is 6 weeks or 180 instructional hours; the Navy program varies from 3-6 weeks of instruction (100-210 hours) of reading instruction, in addition to 1-2 weeks of military instruction. Sixty-six percent of the Army trainees achieved the reading level (5.0) of their programs in an average of 18 days; among Navy trainees, 76% reached the reading level goal (4.5-5.0) in an average of 24 days; 60% of the Airmen achieved the reading objective (6.0) of the program in an average of 42.5 days.

McGonnell, Peter C. and Alfred E. Morrison. Some Results of Two Basic Skills Training Programs in a Rural Setting. Montauge: Prince Edward Island Newstart, Inc., September, 1970.

The basic education program designed by Method of Intellectual Development (MIND), Inc., was used with two samples of adults in an effort to update their basic skills quickly and economically in a non-school environment. Twenty-three males (mean age of 20, mean school years of 7) and 24 females (mean age of 21, mean school years of 7) participated in the MIND program for three hours per day for 12 weeks (90 hours of communication skills, 90 hours of arithmetic skills). The Stanford Achievement Test (Intermediate) and the Otis Quick Scoring Mental Ability Test were given before and after instruction. The groups made significant gains in all testing areas, but the results were not of the magnitude

claimed by the developers of the MIND package. Subjective data showed positive changes in the behavior and attitudes of the trainees.

McKee, John M. and others. Improving the Reading Level of Disadvantaged Adults. Rehabilitation Research Foundation, Elmore, Alabama, 1967.

To help disadvantaged inmates with low reading levels and those considered functionally illiterate, the Draper Correctional Center in Alabama experimented with various reading improvement programs, the most successful of which was the Intermediate Perceptual Development Laboratories (PDL) Reading Program, using the PerceptoScope. After 40 hours of PDL instruction, participants, on the Metropolitan Achievement Test, achieved an overall average increase in grade level of 2.5 compared to a 1.1 grade level gain for non-participating subjects (other vocational trainees).

Mississippi Band of Choctaw Indians. Choctaw Adult Education: Final Report. Submitted to the U. S. Department of Health, Education and Welfare, Bureau of Adult, Vocational and Technical Education, February, 1975.

Since 1972, ten classes in ABE were provided for six of the on-reservation Choctaw communities in Philadelphia, Mississippi. The total enrollment was 360, with a current enrollment of 252. Each center was open for two three-hour flexibly scheduled evening sessions per week and four larger communities were open for six-hour, one-day-each-week sessions. A variety of teaching/learning strategies were employed and individualized instruction was emphasized. The Gray-Votaw-Rogers Series, Primary, Intermediate and Advanced Levels, Forms A and B were used to determine pre- and post-test scores, which follow.

Total Achievement of Adults, by Class Location

Class	N	Pre-Test Mean	Post-Test Mean
1	49	4.81	5.50
2	28	5.66	6.44
3	20	6.48	7.44
4	13	4.63	5.23
5	6	6.27	6.93
6	17	3.17	4.32
7	8	5.16	5.88
8	9	5.86	6.58
9	7	5.27	5.80
10	9	4.61	5.51

Pre- and Post-Test Scores by Subject Area for Class One
(N = 49)

Subject	Pre-Test Mean	Post-Test Mean
Language	2.77	3.36
Spelling	4.75	6.28
Reading Vocabulary	5.37	5.79
Reading Comprehension	5.71	6.54
Math Reasoning	6.16	7.08
Math Computation	5.85	6.94

Analysis of additional data showed the following:

(1) 46 adults earned GEDs.
(2) 70 adults earned 8th grade equivalency certification.
(3) Of the 46 who earned GEDs, 22 enrolled in college courses.
(4) Of the 46 who earned GEDs, 32 received promotions or more attractive employment as a result.
(5) 102 registered to vote in county, state and national elections.
(6) 48 received driver's license permits following driver education instruction; 52 received driver's licenses.
(7) 48 who did not earn GEDs found more attractive employment.
(8) 28 found employment after assistance by staff members.
(9) 20 secured additional job-related training.

Mollenkopf, William G. "Some Results of Three Basic Skills Training Programs in an Industrial Setting," Journal of Applied Psychology, Vol. 53, No. 5, October, 1969, pp. 343-347.

This is a report of three types of training programs carried out by Proctor and Gamble in 1967-68, oriented toward production jobs, typing and secretarial work in offices and technician positions in laboratories. The production employee trainees were divided into two groups. One used the MIND (Methods of Intellectual Development) program in two 2-hour sessions per week over a twenty-week period. Pre- and post-test scores on the Stanford Achievement Test, Intermediate II Battery showed an increase in paragraph meaning grade equivalent scores from a mean of 8.5 and a median of 8.0 to a mean of 9.4 and a median of 10.6, and an increase in arithmetic computation grade equivalent scores from a mean of 8.2 and a median of 7.9 to a mean of 12.1 and a median of 12.6. Pre-post tests for the other group of production employee trainees, using the Reading and Arithmetic Computation Tests of ABLE (Adult Basic Learning Examination), showed increases in reading from a mean of 7.4 and a median of 8.1 to a mean of 8.0 and a median of 8.7, and increases in arithmetic computation from a mean of 5.2 and a median of 5.1 to a mean of 6.8 and a median of 7.3. The office workers group, instructed in spelling, grammar, vocabulary and arithmetic for about sixty hours, showed an increase in post- over pre-test scores in spelling from a mean of 20.6 and a median of 20.0 to a mean of 22.7 and a median of 24.0; an increase in expression scores from a mean of 8.6 and a median of 8.5 to a mean of 9.2 and a median of 9.0. Filing scores showed a pre- to post-test increase from a mean of 28.6 and a median of 29.0 to a mean of 34.8 and a median of 36.0. Arithmetic

scores increased from a pre-test mean of 25.2 and a median of 26.0 to a post-test mean of 30.3 and a median of 30.5; reasoning scores increased from a mean of 8.1 and a median of 8.0 to a mean of 10.0 and a median of 10.0. The laboratory technician training group, instructed in mathematics and English for about seven weeks, increased their mean scores from a pre-test 61.5 to a post-test 75.2. Thus, for each of the three programs, the test results showed an increase in average scores over the training period, with the change in mean significant in all but one instance (paragraph meaning on the Stanford Achievement Test). Each instructional method was associated with improvement in the group average in each instance. Considering that the production workers and office trainees typically spent well under 100 hours in the training program, and that each program had at least two major emphases, the gains made seem impressive.

* Morehead State University, Kentucky Appalachian Adult Education Center. The Adult Learning Center. Issue 6. Morehead, Kentucky, September, 1972.

This report describes an attempt to formulate a broad and comprehensive design for an operational learning center at Morehead State University, Kentucky. In operation since 1967, the Center served about 94 adults between September, 1971 and June, 1972, with an average monthly attendance of 30 receiving about 10 hours of instruction per month. The learning needs of prospective students are diagnosed through formal and/or informal tests; he is then instructed with programmed, individually-paced materials. Comparisons of learning center gains with those of home instruction and traditional classroom instruction showed the following:

Comparative Gains in Reading Achievement
for Three Types of Programs
Ohio Module

	Learning Center	Home Instruction	Traditional Classrooms
Number Tested	139	39	71
Total Hours of Instruction	7,439	1,880	2,523
Average Hours per Student	54	48	36
Total Gain in Grade Equivalent Months	260	95	55
Average Gain per Student in Grade Equivalent Months	19	24	8
Average Gain per Hour of Instruction	.0351	.0503	.0228

Comparative Gains in Arithmetic Achievement
for Three Types of Programs
Ohio Module

	Learning Center	Home Instruction	Traditional Classrooms
Number Tested	137	39	70
Total Hours of Instruction	5,037	1,828	2,546
Average Hours per Student	41	47	36
Total Gain in Grade Equivalent Months	234	77	63
Average Gain per Student in Grade Equivalent Months	17	20	9
Average Gain per Hour of Instruction	.041	.041	.025

Observable Changes in Participants in Three Types of Programs
Ohio Module

	Attitude Toward Education		
	No Change	Some Improvement	Much Improvement
Learning Center	6	37	56
Home Instruction	2	14	23
Traditional Classrooms	20	26	29

National Council of Negro Women, Inc. Final Report on the National Council of Negro Women's Center for Career Advancement in Business and Communication Skills. New York, 1973.

This report evaluates the National Council of Negro Women's training program, in collaboration with Pace College, to upgrade both the education and skill of minority women in entry level clerical jobs. Over a period of 2½ years, 246 women successfully completed the one-semester course, held three evenings a week for a total of nine hours weekly and combining training in the clerical and secretarial skills with basic education, especially in English. Reading was taught with students separated according to general ability, while writing and speech were combined in a language arts course, employing both the tutorial and the reading lab approaches. The following table shows the results of pre-post testing, using the Test of Adult Basic Education (TABE) for one semester.

	Pre-Test Median (Feb., 1972)	Post-Test Median (June, 1972)
Reading Scores	90.5	96.5
Language Scores	105.5	111.5

In the fall of 1972, a follow-up was made of 164 former students who had completed the program in basic education and typing transcription and shorthand. Sixty-eight percent had been upgraded and 91% were working for the same employer as when they began the CCA course.

New Mexico University, Institute for Social Research and Development. A Report of the University of New Mexico's College Enrichment Program. Albuquerque, October, 1971.

The University of New Mexico's College Enrichment Program (CEP) recruits disadvantaged students, helps them prepare for college life with an intensive summer orientation, helps them obtain financial assistance and aids them in dealing with the college environment via counseling, tutoring and other supportive services. Daily instruction was given in freshman English and mathematics, as well as in reading skills; tutoring was provided in any subject area requested by the students (over 800 hours were devoted to tutoring). For purposes of comparison, a group of 68 control subjects was selected and the results were as follow:

Mean Grade Point Averages of 1970 CEP Group, Control Group and 1970 Freshmen

	Semester I	Semester II
CEP Group	2.13	2.44
Control Group	2.01	2.32
All Freshmen	2.39	2.60

Mean Raw and Percentile Scores on Nelson-Denny Reading Tests I and II*
(N = 77)

	Test I		Test II	
	Mean Raw Score	Percentile	Mean Raw Score	Percentile
Vocabulary	27.8	54	35.6	65
Comprehension	33.5	40	36.9	51
Reading Rate (Words per Minute)	272.5	58	596.7	99

*Test I administered at beginning of 1970 summer reading course, Test II at end of course.

Retention Rate of 1970 CEP Freshmen Compared to
1970 Control Freshmen and All 1970 Freshmen

	CEP	Control	All
Number Initially Enrolling (Fall, 1970)	96	68	2,635
Number Re-enrolling (Fall, 1971)	75	41	1,730
Retention Rate	78%	60%	66%

The evaluative research findings, thus, indicate that the CEP has had significant influence both on academic achievement and on the retention rate of disadvantaged students.

New York University, Center for Field Research and School Services. An Evaluation of the College Bound Program. ESEA Title I Program. New York, July, 1973.

The College Bound (CB) program was designed to improve the reading and arithmetic skills and raise the academic level of disadvantaged students and help them gain admission to college. During the 1972-73 academic year, the program was conducted at 32 high schools in New York City and enrolled approximately 11,000 students. The major components of the program were intensive guidance services, double reading and math periods, small class size, tutoring, family assistance services and cultural events. By means of the reading and mathematics sections of the Stanford Achievement Test and the Metropolitan Achievement Test and by the use of grade point averages, the following results were obtained:

Means, Stanford Pre- and Post-Test Scores, Grade 9

Test	Mean Score Pre	Post
Stanford Reading, Advanced Paragraph Meaning	6.88	7.53
Stanford Arithmetic Average	6.82	7.22

Means, Stanford Pre- and Post-Test Scores, Grade 10

Stanford Reading, Advanced Paragraph Meaning	7.91	8.66
Stanford Arithmetic Average	7.69	8.20

Means, MAT Pre- and Post-Test Scores, Grade 10

MAT Reading	45.95	46.32
MAT Math Average	37.36	40.60

Means, MAT Pre- and Post-Test Scores, Grade 11

Test	Mean Score Pre	Post
MAT Reading	49.40	49.76
MAT Math Average	41.25	45.84

Means, MAT Pre- and Post-Test Scores, Grade 12

MAT Reading	52.65	54.07
MAT Math Average	47.06	50.29

Evaluation of College Bound on the basis of grade point averages, however, showed a mean loss of 3.1 for grades 9-12. This decrease in average grades may indicate that CBP students with serious difficulties in reading and arithmetic struggle with increasingly difficult academic material as they advance.

Evaluation of CB on the basis of intergroup comparisons of college admission showed that 95.8% of sampled CB students were admitted to college, compared with 64.0% of the "academic" students; 73.4% of CB students were admitted to the CUNY system; the corresponding proportion of the academic sample was 57.3%. Among the CB graduates admitted to non-CUNY schools, 66.8% were awarded financial aid; only 37.9% of "academic" students received such aid.

* North American Rockwell Information Systems Company. MDTA Basic Education Study. Final Report. Arlington, Virginia, April, 1973.

This report is a case study of MDTA basic education conducted at seventeen training centers. The Test of Adult Basic Education (TABE) was administered to 1,723 trainees at the first testing session and 997 were tested a second time three-five months later. Although the trainees reported an average attainment at the 10.8 grade level, the initial test scores were at the 7.38 grade level in reading and 7.70 grade level in math. Second test scores for 997 trainees averaged 7.42 in reading and 7.72 in math; the overall gain for the 997 trainees tested twice was 0.69 grade levels and the rate of gain was 78 hours per grade level. Considering the short time in the program and that most trainees had only 1-2 hours of basic education each day, this is considered a respectable achievement. The costs of basic education at the 17 training centers varied from a low of $0.29 to a high of $1.68 per trainee hour, exclusive of trainee allowances; the cost per hour had no particular influence on test score gains. Costs per grade level gained varied from $19 to $260. Training costs were, of course, strongly influenced by price and wage differentials in various parts of the U. S.

The evaluators delineate exemplary practices at various training centers in the areas of coordination and cooperation, flexibility, outreach, selection, counseling, orientation, curriculum materials, periodic testing and diagnosis, scheduling, learning labs, skill integration, tutoring and evaluation and make recommendations in each of these areas as well. Among these recommendations, the evaluators emphasize the need to link the MDTA basic education program, aimed at remediating the academic deficiencies of those in occupational training,

with the adult basic education program, aimed almost entirely at raising the level of education of the educationally deprived adult.

Oakland Unified School District. Evaluation of EOA Neighborhood Centers, Adult Basic Education, 1965-1966. Oakland Public Schools Research Department, Oakland, California, 1966.

The Neighborhood Centers project, encompassing seven classrooms at Greater Oakland Neighborhood sites, offered basic remedial instruction to enhance citizens' opportunities for employment or further education. Five of the seven centers focused upon the Spanish-speaking population and instruction was conducted in Spanish. As of March, 1966, enrollment reached 297, ages ranged from 21 to 76 and reading levels from non-readers to junior high. Two-hour sessions were the rule, one center scheduling as many as ten per week, others scheduling 8, 5, 3 and 2. A sample of 37 students, enrolled for an extended period of time and attending classes regularly, was chosen for evaluation. Twenty-seven were women, 10 were men; average age was 55.15 years; average residence in California was 21.38 years; average educational level was 5.95 years; average number of sessions attended was 105.48. By means of the Gates Reading Test, the California Arithmetic Test, the Oakland Public Schools Primary Word List and a student questionnaire, the following findings were obtained:

Gates Reading Test Means
(N = 37)

Word Recognition		Paragraph Reading		Average Score	
Pre	Post	Pre	Post	Pre	Post
4.04	4.26	3.74	4.25	3.91	4.30

California Arithmetic Test Means
(N = 37)

Reasoning		Fundamentals		Average Score	
Pre	Post	Pre	Post	Pre	Post
4.11	4.74	4.19	4.92	4.19	4.91

Oakland Public Schools Primary Word List Means
(N = 37)

Pre	Post
36.82	40.77

Teachers and counselors consistently noted the positive attitudinal changes of the students as a result of the program. Questionnaires returned by 35 of the 37 students indicated a favorable reaction to the program and its instructional areas.

* Pallone, Nathaniel J. No Longer Superfluous, the Educational Rehabilitation of the Hard-Core Unemployed. Final Report. South Bend Community School Corp., Indiana, June, 1965.

Ninety-four hard-core unemployed workers, ranging in age from 20 to 64 years and averaging 7.9 years of formal schooling, enrolled in Project Edrehab, a program of basic educational skills improvement. Using the Rochester Occupational Reading Series, published by Science Research Associates of Chicago, as textual and workbook materials and the Grolier Society's programmed math system for use with teaching machines, the Edrehab staff members allocated 2½ hours daily to language arts instruction, 1 hour daily to group guidance activities. Trainees were assigned to one of four homogeneous classroom groups on the basis of levels of educational achievement on the Stanford Battery, which was also used to measure the following learning outcomes of the program:

Learning Outcomes In Paragraph Comprehension

Group A - Completed 20 Weeks of Ed. Training, Entered Voc. Training

	N	Mean Gain
Male Negro	9	1.0
Female Negro	8	2.2
Male Caucasian	8	1.7

Group B - Completed 36 weeks of Ed. Training, Entered Voc. Trng.

	N	Mean Gain 20 wks.	Mean Gain 36 wks.
Male Negro	12	1.0	2.4
Female Negro	10	0.8	2.3
Male Caucasian	12	1.3	1.9

Group C - Completed 20 Weeks of Ed. Trng., Ineligible for Voc. Trng.

	N	Mean Gain
Male Negro	4	1.0
Female Negro	4	1.3
Male Caucasian	2	0.7
Female Caucasian	1	1.4

Learning Outcomes in Word Meaning

Group A - Completed 20 weeks of Ed. Training, Entered Voc. Training

	N	Mean Gain
Male Negro	9	2.1
Female Negro	8	1.8
Male Caucasian	8	3.9

Group B - Completed 36 weeks of Ed. Training, Entered Voc. Trng.

	N	Mean Gain 20 wks.	Mean Gain 36 wks.
Male Negro	12	0.5	2.0
Female Negro	10	1.6	1.8
Male Caucasian	12	1.0	1.8

Group C - Completed 20 Weeks of Ed. Trng., Ineligible for Voc. Training

	N	Mean Gain
Male Negro	4	0.1
Female Negro	4	1.2
Male Caucasian	2	0.5
Female Caucasian	1	2.1

Learning Outcomes in Spelling

Group A - Completed 20 Weeks of Ed. Trng., Entered Voc. Trng.

	N	Mean Gain
Male Negro	9	1.6
Female Negro	8	1.1
Male Caucasian	8	0.9

Group B - Completed 36 Weeks of Ed. Training, Entered Voc. Trng.

		Mean Gain	
	N	20 wks.	36 wks.
Male Negro	12	1.4	2.9
Female Negro	10	1.5	2.0
Male Caucasian	12	0.3	0.7

Group C - Completed 20 Wks. of Ed. Trng., Ineligible for Voc. Trng.

	N	Mean Gain
Male Negro	4	0.8
Female Negro	4	0.6
Male Caucasian	2	0.6
Female Caucasian	1	1.7

Learning Outcomes in Language Usage

Group A - Completed 20 Weeks of Ed. Trng., Entered Voc. Trng.

	N	Mean Gain
Male Negro	9	1.5
Female Negro	8	0.8
Male Caucasian	8	1.2

Group B - Completed 36 Weeks of Ed. Training, Entered Voc. Trng.

		Mean Gain	
	N	20 wks.	36 wks.
Male Negro	12	0.4	1.2
Female Negro	10	0.7	1.7
Male Caucasian	12	0.2	1.0

Group C - Completed 20 Weeks of Ed. Trng., Ineligible for Voc. Training

	N	Mean Gain
Male Negro	4	0.7
Female Negro	4	0.8
Male Caucasian	2	1.0
Female Caucasian	1	1.2

Learning Outcomes in Arith. Reasoning

Group A - (See Above)

	N	Mean Gain
Male Negro	9	0.9
Female Negro	8	0.9
Male Caucasian	8	1.0

Group B - (See Above)

		Mean Gain	
	N	20 wks.	36 wks.
Male Negro	12	0.3	1.7
Female Negro	10	0.2	1.2
Male Caucasian	12	0.6	1.3

Group C - (See Above)

	N	Mean Gain
Male Negro	4	0.5
Female Negro	4	1.0
Male Caucasian	2	0.3
Female Caucasian	1	1.3

Learning Outcomes in Arith. Computation

Group A - (See Above)

	N	Mean Gain
Male Negro	9	0.9
Female Negro	8	1.3
Male Caucasian	8	1.4

Group B - (See Above)

		Mean Gain	
	N	20 wks.	36 wks.
Male Negro	12	1.2	2.4
Female Negro	10	1.2	1.9
Male Caucasian	12	1.0	2.0

Group C - (See Above)

	N	Mean Gain
Male Negro	4	0.7
Female Negro	4	1.0
Male Caucasian	2	0.6
Female Caucasian	1	1.6

Thus, in a relatively short period, 20 weeks, undereducated hard-core unemployed workers were able to compensate for educational deficiency by some one to three years, and many were then ready to undertake vocational training profitably. Instructional experiences in the basic education component of Project Edrehab were associated with marked and dramatic changes in both educational aptitudes and in inventoried mental ability, as well as with changes in social behavior traits in more mature, more socialized directions.

Perry, George and Nancy Kopperman. A Better Chance: Evaluation of Student Attitudes and Academic Performance, 1964-1972. A Better Chance, Inc., Boston, Massachusetts, March, 1973.

The goal of the "A Better Chance" (ABC) program was to identify and have talented students, who would otherwise be frustrated by poverty, attend competitive secondary schools, colleges and graduate schools, and attain positions of leadership. An intensive eight-week summer program served as a transition to more demanding educational environments in boarding schools. The academic performance of 1,640 ABC students scheduled to graduate from ABC member schools by June, 1972 was examined on the basis of progress made on standardized tests, particularly the Secondary School Admissions Test (SSAT) and the Stanford Achievement Test (SAT). Attitudes, aspirations and self-esteem of ABE participants were also examined. Overall, ABC students competed successfully with their more advantaged classmates: the average ABC student was in the 48th percentile of his graduating class and the percentile rank of the 84 who had been rated excellent by their counselors before entering ABC was 58. Ninety-four percent of the students who entered the program entered college and attended schools much more selective than the national average. (The program had the net effect of increasing the proportion who entered college by 32% or 613 students and increasing the selectivity of the college entered among nearly half the others, an additional 546 students.) While 62% of ABC students will complete college, only 31% of the control group (62% of whom entered college) will do so.

Petersen, Gene and Thomas F. Drury. Basic Education in Manpower Training Programs. Bureau of Social Science Research, Inc., Washington, D. C., September, 1972.

This document is a survey of over 500 of the more than 3,000 manpower projects which have basic or remedial education components. Instruction, individualized, programmed and occupationally specific, was provided to each trainee for an average of approximately 200 hours, flexibly scheduled and divided equally between language and number skills in classes ranging from 10 to 24. The median average hours per participant for the entire basic education component was 205; the median average hours for language skills was 97, for number skills was 89 per participant. The total cost of the 3,000 education components was estimated at $95-$100 million or a median of approximately $266 per trainee, a median of approximately $1.39 per training hour. More than two-thirds of the education components saw GED as a major objective of their efforts. A variety of materials were used, in addition to multi-media teaching aids. The General Aptitude Test

Battery (GATB) and the California Achievement Test were used most frequently for testing purposes.

The following table shows the amount of instruction required to advance a trainee one grade level:

	Total Hours Required to Advance One Grade Level	Hours of Reading Required to Advance One Grade	Hours of Number Skills Required to Advance One Grade
1st Grade Level Entrants	119	111	103
6th Grade Level Entrants	106	90	78
8th Grade Level Entrants	97	73	68
10th Grade Level Entrants	83	65	64

Ray, Darrel D. and Bernard B. Belden. "An Examination of Immediate Gains in a College Reading Improvement Program," Journal of Reading, Vol. 8, No. 3, January, 1965, pp. 201-207.

The purpose of this study was to investigate the results of two groups having completed a college reading improvement program to see if similar gains were made by each group. Group A, made up of 98 subjects from freshmen to graduate students; Group B, of 79 subjects also ranging from freshmen to graduate students. The following results were tabulated, after testing with the Nelson-Denny Reading Tests following 30 hours of instruction:

Group A Scores

Test	Pre-Training Mean	Post-Training Mean	Mean Difference
Vocabulary	27.673	32.061	4.388
Comprehension	34.65	38.88	4.23
Total	62.33	70.95	8.62
Rate	237.15	291.55	54.40

Group B Scores

Test	Pre-Training Mean	Post-Training Mean	Mean Difference
Vocabulary	25.45	30.7088	5.25
Comprehension	34.86	37.22	2.36
Total	60.32	67.92	7.60
Rate	204.08	269.16	65.08

Both groups thus made significant gains in both vocabulary and comprehension performance, as well as in the rate of reading.

Rehabilitation Research Foundation. The Acquisition of Standard English Speech Habits Using Second-Language Techniques: An Experiment in Speech Modification and Generalization in the Verbal Behavior of Prison Inmates. Elmore, Alabama, February, 1970.

This document describes a project to modify the substandard speech habits of Draper Correctional Center inmates in order to (1) foster the acquisition of more standard English usage; (2) determine the extent of transfer or generalization of oral skills to other aspects of verbal behavior; (3) ascertain the influence of oral-usage training on self-concept; and (4) set the stage for the development of a training unit for a basic education program. Subjects were 21 Draper inmates matched on the basis of a pre-oral usage test into seven sets of three each. Experimental subjects were exposed to the intervention treatment (2 hours a day, 5 days a week for 5 weeks) employing second-language techniques; one control group worked on the prison farm and the other attended the MDTA school. Pre- and post-treatment measures were taken of oral and written usage, phoneme discrimination, "spontaneous" speech in a movie description yielding an error count, a structured interview involving behavior checklists and ratings of self-concept, and the Tennessee Self-Concept Scale. The results were as follow:

1. All experimental subjects showed increments averaging 36%, while a majority of control subjects showed slight to moderate decrements averaging -6%.

2. The intervention generated significant transfer to written usage: all experimental subjects showed gains averaging about 20%, while control subjects showed slight declines averaging about -5%.

3. Orderly generalization decrement functions emerged for all experimental subjects. Typically, percentage change scores were highest for oral usage, next for written usage, and least for phoneme discrimination. Control subjects failed to show this systematic decline.

4. Experimental subjects showed a greater reduction in "spontaneous" speech errors than did control subjects.

5. The Tennessee Self-Concept Scale results suggested a pattern effect favoring experimental subjects.

6. The ratings of self-concept and the verbal behavior checklist outcomes from the structured interview indicated a trend for slightly greater gains in the experimental group than in the control group.

Rehabilitation Research Foundation, Elmore, Alabama. The Draper Project. MDTA Experimental and Demonstration Findings No. 6, U. S. Department of Labor, Manpower Administration, 1969.

This is the final report of a project for the training and placement of youthful inmates of the Draper Correctional Center, Elmore, Alabama from September, 1964 to August, 1968. Three hundred thirty-one prisoners completed training; more than 290 were released and placed in jobs, 79% in training-related jobs, while 11% later went into training-related employment. Although 70% of the trainees were recidivists when they entered the program, by 1969 only 25% of all graduates had recidivated. Follow-up data on 228 graduates showed that the released graduates were earning a living and paying taxes, some for the first time in their lives. Average income was $1.75 an hour, $3,640 per year. The individualized learning system that was used, with 34 programmed instructional lessons as its core, demonstrated that trainees in basic education averaged a gain of 1.4 grades on standardized achievement tests after an average of 208 hours of instruction (10-12 hours per week); some had gained as much as 3.9 grades. Of the 80 who took the GED tests, 72 passed; their pre-training monthly salaries of $205.88 increased to $349.30 in post-training employment. The 25 college students who had been used as instructional and counseling aides received college credit for their work at Draper; after graduation, 11 later entered the correctional field or poverty programs.

In summary, education and training appear to be rehabilitative when they are part of a systematic approach to human development which includes realistic preparation for the world of work, tailored job development and placement, and development of community support.

Rochester Jobs, Inc. Operation Young Adults: A Work-Study Program. Final Report of Phase One. Rochester, New York, August, 1971.

Operation Young Adults, a combined work-study program in Rochester, New York, for potential and actual high school dropouts, was designed to demonstrate the relationship between education and the world of work. Three hundred fifty students, aged 14-21, were assigned to three groups. Component A served 100 students, 14 through 16 years of age, by means of an open classroom approach and a sheltered workshop; Component B served 150 students, 16 through 21 years of age, by means of a half-day classroom session and a half-day industrial job; Component C served 100 male students only, 16 through 21 years of age, who received half-day school sessions and half-day work assignments renovating inner city housing. The following were the results of testing at the beginning and end of the academic year:

Pre- Post-Test Scores

	Pre-Test Mean Score*	Post-Test Mean Score*
Component A		
Nelson Reading Test	6.69	7.53
Component B		
Nelson Reading Test	7.03	7.66
Mathematics Inventory Test	41.84	51.63
Social Studies Achievement Test	11.05	13.00
Component C		
Nelson Reading Test	7.20	7.64
Mathematics Inventory Test	53.95	63.56
Social Studies Achievement Test	11.87	13.44

*Reading test scores are expressed in grade levels; math test scores in percentages of 100; social studies test scores in the number of items correct out of a total of 25.

* Roomkin, Myron. An Evaluation of Adult Basic Education Under the Manpower Development and Training Act in Milwaukee, Wisconsin. Ph.D. thesis, University of Wisconsin, Madison, Industrial Relations Research Institute, December, 1970.

This study focuses on the effectiveness of Adult Basic Education in a MDTA program in Milwaukee, Wisconsin. Of the 285 youth referred to the Milwaukee Area Technical College (MTC) during the 1968 project year, an experimental group of 173 were randomly selected for study along with a control group of 150 who did not participate in the ABE program. The average length of participation was 9-12 months, comprising 241-260 hours of instruction. The following results were noted:

Benefits Derived From Earnings-Education Equation Approach and Average Educational Attainment Improvement for All Trainees

Sex and Average Length of Enrollment	Social Benefits (Annual)	Average Educational Attainment Scores (Years)		Average Educational Attainment Change (Years)
Total		Pre	Post	
Male (323 hours)	$48.08	4.5	6.0	1.5
Female (293 hours)	$61.83	5.4	6.3	0.9

(continued)

Sex and Average Length of Enrollment	Social Benefits (Annual)	Average Educational Attainment Scores (Years)		Average Educational Attainment Change (Years)
		Pre	Post	
Three Months or Less				
Male (206 hours)	$17.87	4.4	6.1	1.7
Female (209 hours)	$39.74	5.1	6.1	1.0
More than Three Months				
Male (588 hours)	$86.31	4.5	6.0	1.5
Female (603 hours)	$82.44	5.4	6.3	0.9

Roueche, John E. and R. Wade Kirk. An Evaluation of Innovative Programs Designed to Increase Persistence and Academic Performance of High Risk Students in Community Colleges. Final Report. University of Texas, Austin, Office of Education, Department of Health, Education and Welfare, Washington, D. C., September, 1972.

This study assesses the effectiveness of innovative developmental programs for high risk students at four community junior colleges (two in Texas, one each in New Jersey and North Carolina) with somewhat different approaches to remedial education. Student persistence and academic performance were determined through grades and enrollment data on record cards in the college registrar's office. Comparisons of remedial and non-remedial programs revealed the following:

Comparison of First Semester Mean Grade Point Averages for 1971-72 High Risk Students in Remedial and Non-Remedial Programs for the Three Colleges*
(N = 172)

	First Semester Mean GPA
Remedial	2.66
Non-Remedial	1.96

*The fourth college (New Jersey) does not assign grade point averages.

Comparison of Second Semester Persistence Rates Between 1971-72 High Risk Students in Remedial and Non-Remedial Programs at Three Colleges
(N = 192)

Program	Second Semester Persistence Rates (%)	
	Persist	Not Persist
Remedial	82	18
Non-Remedial	70	30

After an analysis of these and other data, it was concluded that (1) students in remedial programs earned significantly higher grades than did high risk students in non-remedial programs; (2) minority group students in remedial programs earned significantly higher grades than did majority group students in these same programs; (3) students enrolled in remedial programs persisted in college, at least during the initial year, to a significantly greater degree than did comparable students enrolled in non-remedial programs; (4) there was no significant difference in persistence rates between minority and majority group students enrolled in remedial programs.

Schaffran, Jerome A. Project ERA: Adult Basic Education Demonstration Project in Providence, Rhode Island. FY 1973. Final Report. University of Rhode Island, Curriculum Research and Development Center, Kingston, Rhode Island, 1974.

Project ERA was designed to recruit and instruct hard-core functionally illiterate adults in the Model Cities (MC) area (later, all inner-city areas), aimed at Enrollment, Retention and Advancement. Both adult basic education (ABE) and English as a Second Language (ESL) instruction were provided through the cooperation of the Opportunities Industrialization Center (OIC), the Latin American Community Center (LACC) and the South Providence Library (SPL), which furnished the staff and facilities. Classes were held daily from 9:00 a.m. to 3:30 p.m. in one-hour instructional periods, usually in the order of math, English I, independent study with teacher assistance, English II and remedial reading. A student's schedule depended upon his needs; indeed, a large number of classes were taken to inner-city homes, job sites and community centers. Instruction was individualized, including the use of programmed and individual packages, as well as teacher-prepared materials (Learning Activities Packages developed around practical experiences); extra-curricular activities included field trips, guest speakers and social functions. Counselors and ERA staff followed up each student who left the program. The following table shows the reading achievement gains:

ABE Reading Average Monthly Gains (AMG)
(Nelson Reading Test)

Entering Level	Vocabulary		Comprehension	
	N	AMG	N	AMG
Grade 9 plus	7	0.0	--	---
Grade 5 - 8	21	+ 3.1	19	+ 5.2
Grade 0 - 4	9	+ 8.5	17	+ 5.8
Total	37	+ 3.3	36	+ 5.5

The following table presents data relative to the eighth grade and High School Equivalency (HSE) completions and number of students securing jobs:

Student Activity	ABE	ESL	Totals
Total Enrollment	104	201	305
1. Completed 8th grade Equiv.	29	--	29
2. Entered HSE	14	7	21
3. Completed HSE	7	--	7
4. Entered other training	9	9	18
5. Employment	12	46	58

On the basis of questionnaires, student response to ERA and its processes was highly positive.

Schaffran, Jerome A. and John Boulmetis. Project ERA/COPE Adult Basic Education Demonstration Project in Providence, Rhode Island, FY 1974, Final Report. University of Rhode Island, Curriculum Research and Development Center, Kingston, Rhode Island, 1975.

This evaluation of Project ERA (Enrollment, Retention and Advancement) was extended to include the Community Organization for Parent Education (COPE), designed to help raise the educational and economic level of Providence's inner-city population of hard-core functionally illiterate and non-English speaking adults. As in the previous year, the Opportunities Industrialization Center (OIC) operated the ABE segment, with emphasis on pre-vocational training; classes were held daily from 9:00 a.m. to 3:30 p.m. in one-hour instructional periods, which included math, English, remedial reading and independent study with schedules varied to individual needs. Most ESL students were instructed by the Providence ABE Program in home and community center classes. Extra-curricular activities and counseling were part of the overall program. Instruction was individualized, including the use of programmed and individual instruction as well as the Learning Activities Packages developed around practical experiences. The following tables suggest some of the results of the program:

ERA/COPE Academic and Employment Advancements

Advancement	
Total Enrollment	428
Entered other training	18
Got a job or a better job	17
Entered high school equivalency	9
Completed high school equivalency	3
Met personal objectives	5
	52

Changes in Instructional Levels by Number of Days in ERA/COPE

Days in Program	No Change	Increased One Level	Increased Two Levels	Total	% Change
Beginners or Unreported	26	1		27	4%
1 - 30	150	17		167	10%
31 - 60	26	10		36	28%
61 - 90	2	6		8	75%
91 - 120	2	1	1	4	50%

The Opportunities Industrialization Center (OIC) component--the ABE segment of Project ERA/COPE--reported that of the 34 students completing ABE, 23 entered HSE courses and 11, vocational training. Data on reading achievement indicated that students remaining in the program longer tended to show greater gains. Likewise, the number of students showing advancement in English usage and math increased proportionately with the amount of time spent in the program.

Scheier, Elaine and others. A Summary of the Evaluation of the Educational Developmental Laboratories/American Institute of Banking High School Equivalency Program for Bank Trainees. Educational Developmental Labs., Inc., Research Department, New York, March, 1972.

This document summarizes a program conducted jointly by Educational Development Laboratories (EDL) and the American Institute of Banking (AIB) for 435 undereducated students in the New York area between November, 1970 and September, 1971. Each of three training periods (I, II, and III) of 13 weeks duration consisted of six hours daily instruction in critical reading, mathematics and English, of which one period was spent in a Learning-100 laboratory. A total of 372 students completed the program and of these, 364 took the GED examination. For purposes of evaluation, the New York State Minimum Competency Test and the General Educational Development Test were administered at each training session and the results showed that the mean scores improved in each successive training period. While 29% of the students in Training Session I scored 204 or below on the GED, only 14% and 9% scored at that level during Training Sessions II and III, respectively; the percentage of students attaining scores of 265 or above increased from 6% to 11% to 14%, respectively, over the three sessions. For each successive training session the percentage of students who passed the GED increased from 46% to 58% to 63%. The improvement in scores and increases in GED scores may be attributed to improved diagnosis of learning deficiencies, prescriptive techniques, and shifts in instructional emphasis.

Scheier, Elaine and Donald R. Senter. Evaluation of Learning-100, an Adult Basic Education Project in Bedford-Stuyvesant, 1967-68. Huntington, New York: Educational Developmental Labs., Inc., February, 1969.

This study compared the effectiveness of Learning-100 with that of a conventional reading program in the Bedford-Stuyvesant section of Brooklyn. Two experimental (L-100) classes of 49 and two control classes of 47 met three evenings per week for three hours. About 70% of the L-100 students were over age 35; 60% of the control students were under 35; both groups were over 90% female. About 60% of the L-100 students had completed 4-7 years of school; 60% of control group students had completed 9-12 years of school. The average age of L-100 teachers was 46, with 16 years of teaching experience; the average age of control group teachers was 30, with 4 years of experience. L-100 students averaged 157 hours of attendance; control students, 170 hours. Using the Metropolitan Achievement Test, Reading Intermediate Level, 37 L-100 students improved their pre-test scores of 40.49 to 53.33; 26 control group students, 43.58 to 49.84. These significant differences in achievement favored the L-100 group.

Schnell, Thomas R. Teaching Educationally Disadvantaged Adults to Read. Paper presented at the annual convention of the International Reading Association, Denver, May, 1973.

This study compares the effectiveness of two approaches to teaching survival reading skills to 50 semi-literate adults, ages 24 to 53, from a black ghetto area of St. Louis, Missouri, from May through August, 1972. One group of 25 (A) was given reading instruction using high interest-low vocabulary reading materials at appropriate levels of difficulty after being tested on the Gray Oral Reading Test (GORT). The second group of 25 (B) was given reading instruction with materials used in daily activities--newspapers, magazines, job applications, appliance warranties, etc.--with no attention given to the readability level of any of the materials. Following four months of small group tutoring three times a week, both groups were retested with the following results:

Pre- and Post-Test Means of Groups A and B
on Gray Oral Reading Test
(N = 50)

Group	Pre-Test Mean	Post-Test Mean
A	4.7	5.6
B	4.8	6.4

Not only did Group B make greater gains, but they also had more positive feelings about the program. It appeared that increases in performance were more closely related to motivation than to instructional materials.

Sharar, Paul H. and others. The TRY Project: A Demonstration of Comprehensive Educational Model for Disadvantaged Youth. Final Report. Training Resources for Youth, Brooklyn, New York, February, 1969.

The TRY Project was a demonstration project for out-of-school, out-of-work or underemployed male youth, age 17-21, in the Bedford-Stuyvesant area of Brooklyn, New York. The basic goals were to develop sound methods and techniques for producing positive changes in the attitudes and behaviors of participants and to provide an educational environment in which the youth could learn the necessary vocational, personal and social skills. The Metropolitan Achievement Test (MAT), the Army Beta IQ Test and the Bennett Mechanical Comprehension Test were administered during the first three weeks of the project, with the following MAT results:

MAT Mean Grade Levels at Entry

	Number	Grade Mean
Word Knowledge	476	6.47
Reading Comprehension	480	6.29
Spelling	472	6.43
Language Usage	447	5.11
Language Skills	400	5.90
Arithmetic Computation	481	5.92
Arithmetic Problem Solving	478	6.00

On the Revised Beta IQ, it is interesting to note that more than 40% of 381 TRY trainees scored above the average of the general population and that fully two-thirds fell in the normal, above normal or high classification of learning ability.

The following table shows the training outcomes (by mean grades) of the life skills-occupational training curriculum on graduates after an average of one year in the program, compared with the mean grades of short- and long-term dropouts.

MAT Test	Graduates (N = 210)	Short-Term Dropouts (N = 67)	Long-Term Dropouts (N = 98)
Word Knowledge	6.8	6.0	5.9
Reading Comprehension	6.5	5.9	5.8
Spelling	6.8	6.1	5.8
Language Usage	5.5	4.7	4.7
Language Skills	6.1	5.9	5.4
Arithmetic Computation	6.1	5.7	5.7

Summary data indicate that of the total of 544 TRY trainees, 48% graduated, 45% dropped out, 7% moved or had non-program related reasons for leaving the project; more than 70% of TRY graduates were placed; of these, 12% went to college, 76% were placed in training-related jobs, 7% entered the armed forces, 4% were placed in non-training related jobs, and 1% went on to other training

programs. Thus, a significant percentage of program graduates broke out of the cycle of poverty.

Shea, J. J. Project PREP--A Program for Recovering and Extending Academic Potential for High School Underachievers Seeking Entrance at a Regional Community College. Greenfield Community College, Massachusetts, June, 1966.

This program attempted to determine if a planned summer remedial program (PREP), including reading, English and mathematics instruction, together with personal-vocational counseling could prepare identified high school graduate-underachievers for success in a two-year terminal junior college program. The seven-week, 105-hour remedial program involved 40 PREP participants randomly divided into two groups, 20 of whom received remediation, the other 20 receiving remediation and counseling. Pre-post test results showed no significant difference between the two groups on the Iowa Test of Educational Development; a significant (at the .05 level) difference on the Lorge-Thorndike Test of Intelligence; no significant difference on the Sequential Test of Educational Progress; a significant (at the .05 level) difference in both speed and level of comprehension on the Davis Reading Test; a significant (at the .05 level) difference on the verbal section of the Scholastic Aptitude Test, but no significant difference on the math section of that test. After a follow-up survey of first semester grade point averages, it was concluded that counseling did not have a differentiating effect on these grades. However, only 13 of the 33 students who entered a junior college did not successfully complete the first semester.

Smith, J. Vernon and others. Concerted Services in Arkansas: An Evaluation of Developmental Change. Center Research and Development Report No. 6. North Carolina State University, Raleigh, Center for Occupational Education, 1969.

The Concerted Services in Training and Education (CSTE) pilot, St. Francis County, Arkansas program focused on the problems of a rural outmigration area characterized by low income and underemployment. Among the several objectives of the program was one to increase the basic educational skills of participants. Total participation in all ABE classes was 576 in 1967-68. Evidence of the improvement made by ABE trainees (welding students) may be seen in the following table:

Equivalency in School Years
(Metropolitan Achievement Test)

	A	B	C	D	E	F	G
Test-February 15, 1967	3.5	3.3	3.1	4.2	2.8	4.8	4.7
Test-June 8, 1967	4.0	3.6	3.4	4.2	3.4	6.0	5.2
Test-September 14, 1967	4.0	3.6	3.7	4.0	4.2	6.0	6.2

A - Word Knowledge
B - Word Discrimination
C - Reading
D - Spelling
E - Language
F - Arithmetic Computation
G - Arithmetic Problem Solving and Concepts

Interviews with trainees revealed that 60.4% of the graduates regularly read a newspaper and 56.4% regularly read a magazine compared to 45.8% and 41.7%, respectively, of a control non-graduate sample.

Sullivan, Clyde E. and Wallace Mandell. Restoration of Youth Through Training: Final Report. Wakoff Research Center, Staten Island, New York, April, 1967.

This report relates the experience and findings of RYT (Restoration of Youth Through Training), a joint venture, begun in 1963, of the Wakoff Research Center of the Staten Island Mental Health Society and the New York City Department of Correction, designed to provide special training for a sample of young men serving time in the New York City jail (Rikers Island) and to study their subsequent performance and adjustment upon release. Three hundred young men (16 to 21 years of age) who passed a basic skills examination which indicated they were capable of learning data-processing techniques (IBM Aptitude Test score of at least 15, IQ score of at least 80) were selected as subjects of the study. One-half, the experimental group, received training on IBM punched-card data-processing machines and remedial reading help, using S.R.A. programmed reading techniques; the other 150, the control group, followed ordinary jail routines. The following table shows the results:

Mean Test Scores Before and After Training
and Remedial Reading Instruction

	Experimental				Control			
Tests	No.	Before	No.	After	No.	Before	No.	After
Beta IQ	119	103.3	30	108.0	85	103.7	40	104.4
IBM Aptitude	119	21.7	99	24.9	96	22.7	26	23.5
Gates Reading (Grade Level)	119	8.7	81	9.1	84	8.5	24	8.3
Gates Speed of Reading	119	23.1	81	23.7	84	22.3	24	19.4
Gates Vocabulary	119	41.7	81	43.1	84	40.6	24	40.5
Gates Comprehension	119	30.9	81	33.8	84	31.2	24	29.8

The experimental group retest scores, thus, showed improvement in every category, while the control group scores were lower in every category except the Beta. Among the other findings: (1) the RYT program, coupled with post-release services, made a difference in the subsequent job performance and social adjustment of young offenders; (2) the rate of return to jail can be reduced: 48% of the experimentals vs. 66% of the controls committed crimes which brought them back to jail; (3) 55% of the experimentals vs. 80% of the controls who were drug addicts returned to jail; (4) 71% of the experimentals vs. 16% of the controls found work in companies using automated data-processing techniques; (5) 48% of experimentals vs. 18% of controls found white-collar jobs while 5% of experimentals and 22% of controls worked in laboring occupations; (6) 25% of experimentals vs. 3% of controls found jobs leading to promotion; (7) 89% of the jobs held by experimentals provided on-the-job training while only 69% of those held by controls did so; (8) one year later, 17% of experimentals vs. 9% of controls were in the company where they were originally placed.

System Development Corporation. Final Report: Evaluation and Experimental Investigation of the Job Corps Reading Program in a Conservation Center. Santa Monica, California, November, 1970.

This report on the Job Corps Reading Program (JCRP) at the Weber Basin Job Corps Center in Ogden, Utah, deals with the final phase of the evaluation and investigation and includes the program revisions designed to improve JCRP effectiveness and introduced in Phases I and II. (Those revisions included the portion of Beginning Reading that uses Sullivan Books 1, 2 and 3 and the initial Level 1 portion of Graded Reading.) During Phase III, those skill areas to be improved were defined, improved initial placement procedures were developed, improved instructional and testing materials and procedures were prepared, a tutoring program was developed and evaluated, more effective procedures for managing instruction and for motivating Corps members were instituted, and the effects of these changes were evaluated. (Since only five Corpsmen were in the Beginning Reading program at the time of the report, evaluation of this segment of the JCRP did not appear to be meaningful.) In Graded Reading, Level 1, the overall mean for all specific objectives for the ten Corps members improved from a pre-test of 46.0% to a post-test of 71.8%, a gain of 25.8%; the overall mean for the total Level 1 mastery test improved from 65.7% to 74.3%, a gain of 8.6%.

Tanner, Daniel and Genaro Lachica. The Effects of an In-Residence Summer Program on the Academic-Year Performance of Underachieving Disadvantaged High School Youth. Paper presented at the annual meeting of the American Educational Research Association, New York City, February, 1967.

Five hundred seventy-nine disadvantaged high school boys and girls with high academic potential and low achievement and who were completing the ninth grade were identified in schools throughout New York City as College Discovery students. Five high school Development Centers were set up (one in each borough of New York) within an existing high school in order to create a new pre-college learning environment for these disadvantaged youth. The Centers featured block-time classes, individualized instruction, remedial work, a college-student tutorial program, a cultural program and field trips to college campuses. One hundred fifty-five of these 579 students were randomly designated as the experimental group and participated in an eight-week Upward Bound summer program on the Columbia University campus, followed by an academic-year program in the high school Development Centers; the control group of 424 did not participate in the summer project but were enrolled in the academic-year program in the Centers. At the end of the fall semester, the adjusted grade mean for the experimental (summer) group students was 75.38; for the control (non-summer) students, 72.80. At the end of the next (spring) semester, summer students' adjusted grade mean was 73.38, that of non-summer students, 72.29. Adjusted mean for the Geometry Regents Examination was 75.78 for the summer group, 66.40 for the non-summer group. In view of these results, the author hypothesized that participation in repeated summer programs will eventually find the experimental group at a significant advantage over the control population, not only in academic achievement, but in rate of college entrance and performance in college.

* Tuskegee Institute. Experiment in Motivating Functional Illiterates to Learn. Final Report. Tuskegee, Alabama, School of Applied Sciences, August, 1969.

This research investigated whether low income rural functional illiterates could be motivated to learn by a pro-rated stipend given on the basis of academic performance. Fifty experimental subjects, ages 18-45 and predominantly female, received $15 weekly plus stipends; 50 control subjects received a flat $15 weekly. Classes were held for 12 hours weekly, for 32 weeks; all 100 participants were exposed to each of four teachers by exchanging teachers every two months. Pre-post scores on the Wide Range Achievement Test (spelling, math, reading) and the Revised Beta Test (intelligence) produced the following results:

	Experimental Group	Control Group
Pre-Beta Test Mean Score	71.0	59.3
Post-Beta Test Mean Score	80.3	73.1
Pre-WRAT Reading Mean Score	5.1	5.7
Post-WRAT Reading Mean Score	4.0	3.8
Pre-WRAT Arithmetic Mean Score	2.5	1.7
Post-WRAT Arithmetic Mean Score	3.6	3.4

These test results and GED test performance significantly favored experimental subjects.

* Vanderbilt University Medical Center. Developing and Evaluating a System for Upgrading Educationally Disadvantaged Employees Through After-Hour Education. Nashville, Tennessee, August, 1970.

Thirteen employees of the Vanderbilt Medical Center, a part of Vanderbilt University, Nashville, Tennessee, were selected for a 1969-1970 after-hour educational development program. IQs ranged from 60 to 106, average grade equivalency from 4.0 to 6.0 based on pre-testing with the Stanford Achievement Test. Afternoon classes met from 3:30 to 5:30, night classes from 7:00 to 9:00. Two monitors provided the instruction, using the MIND program and consisting of reading, math and vocabulary development. The following tables indicate some of the results after testing at the completion of the program (after approximately 180 hours of instruction):

Table 1

IQ	No. of Students	Average Increase In Grade Level Equivalency
60-69	3	1.3
70-79	2	1.75
80-89	4	1.0
90-99	1	.4
100-106	3	1.7

Table 2

Students Ages and Progress

Age	No. of Students	Average Increase In Grade Level Equivalency
50 & up	3	.8
40-49	5	1.34
30-39	3	1.27
20-29	2	2.00
Total	13	1.3

Vermeulen, Robert. A Study of Selected Manpower Development Programs for Training Adults. Ed.D thesis, Western Michigan University, Kalamazoo, 1968.

This study concentrated on evaluating the success of the Lincoln Skills Center in Kalamazoo in helping trainees improve their basic education and vocational skills and then to find suitable employment. Relationships were also investigated between vocational proficiency and literacy skill levels, as well as between basic education achievement and job success. An interview schedule, the Stanford Achievement Test (Advanced Form), the Fundamental Achievement Series (Form XB), skills proficiency rating forms, a Michigan

Employment Security Commission training form, and a follow-up form were used to obtain data from 156 trainees and 121 graduates. Findings: (1) trainees with initial skills above sixth grade level made significant gains during 12 weeks of basic education, but lower level trainees did not; (2) vocational training helped the majority, although significant gains were confined to certain courses; (3) trainees generally showed gains in job placement, job status, wages, confidence, and length of employment; (4) a majority held training related jobs.

Wasson, John B. Evaluation of an Eight Week Adult Education Program. St. Paul, Minnesota: Ramsey County Welfare Department, Work and Training Program, September, 1965.

As part of a training program for families receiving public assistance, an 8-week summer adult education program for 54 students was conducted in 1965 by the Ramsey County (Minnesota) Welfare Department and the St. Paul public schools. Three instructional periods of 45 minutes each--in reading, math and vocational guidance-human relations--were followed by a library and/or counseling period. Pre- and post-tests, using the Gates Reading Survey, the Jastak Wide Range Achievement Test, Arithmetic Section, the Army General Classification Test, the Minnesota Paper Formboard, the Kuder Preference Record, Vocational, and the Minnesota Multiphasic Personality Inventory were administered. The mean scores on the first two of these measures were as follow:

Pre-Post Test Reading Means

	Pre-Test	Post-Test
Reading Speed	9.5	11.2
Vocabulary	9.2	10.3
Comprehension	8.7	9.8
Composite	9.2	10.5

Pre-Post Test Arithmetic Computation Means

Pre-Test	Post-Test
5.8	8.3

Thirteen of the students passed the GED test, all of whom had pre-program reading grade levels of 10.0 or higher. Eighteen of the students failed the GED test, all of whom had pre-program reading grade levels of below 9th grade. The comments, both informal and formal, of both students and their counselors about the educational program and how it was handled were highly favorable.

Wessman, Alden E. Evaluation of Project ABC (A Better Chance): An Evaluation of Dartmouth College-Independent Schools Scholarship Program for Disadvantaged High School Students. Final Report. Dartmouth College, Hanover, New Hampshire, April, 1969.

This is an evaluation study of Project ABC, a pre-college talent search program that provides academically able, motivated disadvantaged youth with scholarships to secondary schools, after an intensive summer transitional program. For the 82 disadvantaged boys, predominantly Negroes, who entered the program in 1965, it was found that (1) the boys' academic records ranged from complete failure to outstanding success; (2) test-retest data on the Otis I.Q. and Cooperative English tests showed that the boys made no appreciable gains over a two-year period; (3) overall, the students made a satisfactory adjustment, and psychological inventory scores showed statistically significant changes for the boys, who seemed to become more tense, yet more self-assured; (4) social adjustment and academic performance were highly correlated; and (5) by the beginning of the fourth year, 26% of the boys had dropped out, 60% for academic reasons, 40% for adjustment difficulties.

Wiesner, Peter. The Salem Cable Television Project Final Report: A Demonstration of the Use of Cable Television and Paraprofessional Tutors as an Alternative to Traditional ABE Classroom Instruction. Salem, New Jersey, July, 1975.

This report deals with an attempt to use television and tutoring as an alternative form of Adult Education and to make this education both convenient and relevant. Focusing on basic reading and math skills, the Salem Project began in January, 1974, was funded for 18 months by the U. S. Office of Education and utilized the New Streamlined English Reading Series (a picture/symbol association method which was easily translated into video programs) and a teacher-developed math series. A total of 121 lessons, 59 in reading, 49 in math and 13 in consumer education, were developed to be included in approximately 50 hours of TV instruction. Paraprofessional tutors provided reinforcement to and feedback from the televised lessons in weekly visits to the homes. The field test, conducted over a 20-week period, showed the following results for 26 students: average gain in reading, 5.7 points (perfect score: 23); average gain in math, 4.3 points (perfect score: 24). This represented an increase of 25% and 18%, respectively, in correct answers on the tests and the gains were significant at the .01 level for both subjects.

"Young Migrants Harvest Diplomas," Manpower, May, 1972, pp. 28-32.

A Tuskegee Institute (Alabama) manpower development project enrolled 180 heads of rural households, with under $1,200 annual income and below eighth grade literacy, in a program of counseling, basic education and job training. One-half lived on campus with access to all college activities; the other half commuted daily from their homes. The two groups were comparable with respect to age and intelligence. Over 90% stayed through the 12-month program.

Those living on campus had better attendance records and showed greater educational and vocational advance. Of the graduates, over 80% were placed in jobs with an average pay of $2.16 per hour. Project personnel recommend that literacy and math courses be tied to occupational skills training.

DISCUSSION

A careful consideration of the preceding abstracts--and of the annotations in the Appendix--reveals persistent themes arising from the basic assumptions of most of the research concerned with adult basic education for the disadvantaged. A majority of the programs appeared to have been organized around certain target populations on the basis of age, minority group status and employment characteristics, as well as on the basis of either academic or vocational content, or a combination of the two. As a result, the findings discussed were influenced by this organization.

The first observation the reviewer might make is that, by and large, most of the programs cited were to some degree "successful" with regard to learning achievement (see Appendix B), employability and higher incomes. However, methodological problems, such as the scarcity of evaluation designs which employed control groups, make the attribution of "success" to "treatment" rather questionable. Moreover, major measures of "success" were short-term--grade level increase in reading, mathematics and other specific skill areas--measures which might be used as predictors of performance. Long-range benefits other than those related to employment and income--retention of learning, motivation for continued learning, behavioral and attitudinal change, improvement in the quality of life--were rarely addressed, due in major part to the constraints of project resources.

Second, the methodological limitations and the lack of cross-program comparative analyses appeared to preclude the possibility of identifying any one method, technique or material as superior to another, although many of these are individually assessed. All of the studies emphasized the need for intelligence, screening, placement and achievement tests suitable for the disadvantaged adult, as well as the need for high interest, low reading level material. All stressed the necessity of "personalizing the instruction rather than instructionalizing the person." But assessment of tutoring techniques seldom considered the basic question of why high school graduates frequently succeed as tutors as well as college graduates and experienced teachers.

Third, the reviewer might inquire as to the scope of these adult education programs--did they reach out to the target population and satisfy their needs? The dilemma of conflicting points of view on adult education needs--one which is still unresolved in other areas as well as in education--is represented by the needs expressed by potential participants in adult education programs vs. the assessed needs pronounced by educators. The educator sees the need for basic transferable skills in a rapidly changing technological society, while the participant hopes to acquire specific, marketable skills and questions the value of formal academic credentials. Inasmuch as most of the researchers held that adult basic education should teach both basic literacy skills and social living skills, however, the expressed needs of the target population might well be probed by means of surveys, group meetings, demographic studies and the like. Thereafter, decisions might more satisfactorily be reached as to where programs should be located, what should

be taught, and what techniques should be employed--learning labs, traditional classrooms, individualized instruction, tutorial programs, or combinations of all of these, assuming they provide an environment that facilitates learning. Most adult educators believe that recruitment might best be accomplished through canvassing, linkage with community agencies serving the target population, the mass media, and cooperation with business, industry and labor groups.

Fourth, the retention of participants appeared to be a recurring problem throughout these programs. Inasmuch as there seemed to be a positive relationship between program completion and wage rates (completers experienced three times the annual increase of non-completors) as well as low job attrition, such findings have significant implications for adult educators. Drop-out rates in almost all adult education programs have been consistently high, beginning with that most famous of early programs to combat illiteracy, the Moonlight School of eastern Kentucky. The Army training of illiterates in World War II was perhaps the only exception to the drop-out dilemma, but they had the advantage of "captive" participants, unlimited funds, and no time restrictions. However, without a follow-up component, the long-range effects of the program were never determined.

Fifth, the basic assumptions of adult education literature--assumptions which have seldom been questioned--characterize the illiterate and functionally illiterate as well as the undereducated as of low ego strength and poor self-concept, aware of bounties in which he has little realistic prospect of sharing. It has been concluded that there are social-psychological considerations (although there appear to be differences of opinion as to the particular characteristics) affecting his learning: anxiety, inhibition, pessimism, hostility, a lack of self-confidence, a short time perspective, lack of motivation. His limited perceptions of the value of education as a means of personal achievement and his frequent rejection of institutionalized patterns of education, educators believe, simply mean that there is a great need to discover new patterns and more workable strategies which will be acceptable. Short-term reinforcers or rewards for attendance and appropriate academic effort, as well as intensive counseling, are but a few of the strategies suggested for consideration; teaching machines, for example, are believed to provide an atmosphere free of anxiety and frustration in which the adult learner may proceed at his own pace.

Sixth, most adult educators seem to agree that there is a most compelling need for in-depth, complete and continuing evaluation of current programs, programs with reliable data, including control groups, and with both short- and long-term goals carefully delineated. Such evaluation, they feel, should consider particularly the unique aspects of adult learning (termed andragogy by Malcom Knowles, the adult education specialist) compared with those of pedagogy: the adult learner is a self-directed human being, not a dependent one; he has an accumulation and growing reservoir of experience as a source of learning; his readiness to learn is increasingly oriented to the developmental tasks of his social roles; and his time perspective changes from one of postponed application of knowledge to immediacy of application and thus from subject-centeredness to problem-centeredness. Educators see these unique features as having significant implications for adult education objectives: while grandiloquent ultimate goals may be impressive, they cannot be measured and thus are likely to meet with less "success" than the more realistic measures of actual change. Such practical evaluation, it is believed, would be more acceptable to both educators and

participants.

In spite of all the foregoing caveats, some general statements can be made concerning the studies surveyed. By and large, those adult students who scored lowest on pre-tests made the greatest achievement gains, although these gains did not necessarily lead to sustained improvement in either reading or mathematics. Special or restructured college-level courses, reduced college load and exposure to college life generally improved the later grade point averages of marginal students, but these grade point averages frequently were still below those of non-disadvantaged college students. Older adult education participants often made greater gains in vocational and reading skills than did younger participants. Edward Thorndike's early Esperanto experiment showed greater percentage gains for those over 35 than for those under 35. If this assumption was correct and the ability to learn Esperanto demonstrates the ability to learn other languages, math and the natural and social sciences, one may infer that the power to learn--when separated from speed in test performance--is at least as great in middle age as in youth. On the other hand, the longer younger students had been out of school, the greater their achievement in vocational and computational courses, but the smaller their gain in reading and problem-solving.

Almost without exception, MDTA trainees receiving both basic and technical education made greater academic gains and were more likely to find suitable employment at higher average weekly salaries with better chances for promotion than those trainees who received either basic or technical education alone. As a result of this finding, professionals hold that a well-devised educational system should express the academic courses in terms useful to non-verbal students, as well as present vocational material to verbal students who would otherwise be deprived of the opportunities to know and understand the manual arts. This system, they believe, would produce more sophisticated technicians to manage the more complicated products of our age.

Although in several programs the experimental group, following reading and math instruction, showed little or no advance over the control group, it was found that in many cases the experimental group surpassed the control group in satisfactory job interviews and applications, most work functions, attendance, punctuality, behavior and appearance. This fact once again emphasizes the non-academic, attitudinal and behavioral achievement of adult education participants as well as the fact that vocational training or employment success may not be significantly related to academic success. Particularly with regard to disadvantaged high school students, educational enrichment programs were found to have led to better social and psychological adjustment, if not to academic gains.

There appeared to be no consensus with regard to instructional systems. Some studies showed that English-As-A-Second-Language students achieved significant gains in test scores on oral and reading diagnostic tests, but much smaller gains on math tests. The Initial Teaching Alphabet instructional system used in several programs proved no better than other systems; Sullivan Reading Materials adapted to the Edison Talking Typewriter, on the other hand, enabled some adult students to reach the sixth grade reading level from the fifth grade level in just over 54 hours. While the use of Learning-100, a multimedia, multimodal, multilevel communication system, resulted in significantly greater increases in reading test scores than did the use of standard reading texts, the latter have

always been considered of little value to disadvantaged adults. Several Manpower Administration programs found that the use of LEARN, MIND and contractor-developed materials all resulted in educational improvement, though more in numeric than verbal ability. The Armed Forces successfully employed the Reader's Digest Skill Builders and Science Research Associates' Reading Laboratory, together with audio-visual equipment, in their literacy training. Nevertheless, there remains a lack of information on the relative effectiveness of the various instructional systems; indeed, some maintain that packaged courses disregard the cultural characteristics of students and are frequently counter-productive. In fact, a St. Louis research project instructed its students through the use of materials found in daily life: newspapers, magazines, job applications, appliance warranties, and the like, with no attention given to reading level. The experimental group made greater reading gains than the control group, which used high interest, low vocabulary reading materials.

Nor was there a consensus on the merits of various methods of instruction. While Morehead State University found that reading gains were higher among home-instructed adults than among those in either learning centers or traditional classrooms, arithmetic gains were found to be the same among learning center and home-instructed adults. Computer-assisted instruction in several instances was found difficult to master and prone to produce anxiety among disadvantaged students. It was also found that vocational/academic trainees were more likely to remain in programs if they were tutored for two hours every day rather than once a week for an entire day. The use of TV instruction, together with weekly follow-up tutoring, led in several instances to significant gains in reading and math, although no control was employed. Stipends and rewards for attendance and achievement have produced mixed results. On-site, released time classes generally attracted and retained larger enrollments than after-hours classes among the employed. Young migrants living on campus achieved greater educational and vocational advancement than did those commuting. It appeared, therefore, that each instructional method provided advantages for certain populations, so long as the individual participant experienced at least initial success.

Several of the projects surveyed were concerned primarily with minority groups. Disadvantaged American Indians in an apprenticeship center increased their annual income, worked more weeks per year and received higher hourly wages as a result of training. Choctaw adult education programs led many adult participants not only to eighth grade equivalency, high school equivalency, college entrance and better jobs, but also to greater voter registration and thus to expanded social roles. The basic education component of several manpower programs appeared to have had significant positive employment and earnings impacts which were particularly dramatic when they freed technically skilled immigrants from communication handicaps. Although a training program for Negro women clerical workers produced only minimal improvement in reading and language scores, job upgrading and greater job stability were noted. Minority participants in a junior college remedial program for high-risk students achieved higher grade point averages than the majority enrollees.

Adult education programs for inmates of penal institutions have proliferated during the last ten years in an attempt to attack the problem of recidivism and to rehabilitate and prepare those incarcerated for eventual release. It appeared from the survey that first termers were more likely to enroll and remain in basic education programs but that parole violaters made the greatest achievement gains, with multi-termers achieving the smallest gains. A women's reforma-

tory Right-to-Read program, employing a system of awards and bonuses for attendance and achievement, resulted in one grade level average increase after a little more than 67 hours of instruction. One hundred fifty-five Florida inmates averaged a 1.5 grade level increment every 7½ months, with advanced students (grades 8 through 12) making the greatest gains. The most successful program at the Draper Correctional Center employed the Intermediate Perceptual Development Laboratories system together with a PerceptoScope: after 40 hours of instruction, students gained 2.5 grade levels compared to a 1.1 grade level gain for non-participants. At the same institution, only 25% of the inmates who passed the GED examination recidivated. Following release, New York City jail inmates, trained on IBM data-processing machines and given counseling services, performed better on their jobs and achieved better social adjustment and lower recidivism rates than did those not participating in the program. It may be concluded from such findings that education and training are rehabilitative when they are part of a systematic approach to human development.

In summary, it can be said that some basic questions concerning adult education--what kind of teachers, teaching what kind of students, with what kind of content at what level of complexity in what teaching style--have as yet not been definitively answered. Although many of the programs surveyed appeared to have resulted in devising more workable strategies and in achieving more viable results, test scores by and large were not permanently altered by compensatory intervention. Disadvantaged students usually performed poorly even in special programs, perhaps in part due to the inability to remove such students from conditions antithetical to academic development as well as to the basic relationship of education with status, attitudes and values. While professionals feel that education should be a goal in itself--a means of overcoming "social starvation"--not diminished by its failure to produce income, many of the evaluations surveyed adopted a univariate criterion of success--economic improvement. Perhaps the struggle to overcome a great cluster of educational, personal-social and vocational handicaps is so gargantuan and so complex that a longer period of treatment is required; short run exposure to compensatory education appeared to have been of questionable value. Moreover, although income increases were noted for many disadvantaged participants, these increases were generally only from deep poverty to its upper margins. Nevertheless, if adult basic education leads to personal satisfaction, future possibilities of enrichment and more responsible and productive citizenship, it can still be regarded as "successful." Future evaluations of specific adult education programs, if they are to provide some insight into adult learning, would be more meaningful if they consider the modalities, experiential background and motivations of the learners, if objectives and priorities are more specifically delineated, and if record-keeping is more complete, exact and comprehensive. (See Appendix C.) Only then can adult education programs be scientifically as well as realistically appraised.

APPENDIX A

ANNOTATED BIBLIOGRAPHY

Adair, J. B. (Ed.). Adult Basic Education, Priorities and Potential. North Carolina University, Raleigh, State University Department of Adult Education, September, 1969.

A conference report dealing with the roles and objectives of ABE in manpower development; educational personnel and technology; educational innovation; special problems in teaching disadvantaged adults.

Adult Basic Education Pilot Project, June, 1969.

A project organized by the Texas Extension Division of Texas University for at least 200 undereducated adults, to evaluate materials and teaching techniques in actual classroom use, develop a student record and progress chart for reporting and evaluation, explore student placement and identify means of recruiting students.

Alabama University, Institute of Higher Education Research and Services. Rural Junior College Development Consortium: A Cooperative Venture of Junior Colleges in Alabama and Mississippi. Progress Report 1970-1973, 1973.

A description of the rural junior college development consortium, formed to help the six participating rural junior colleges improve the delivery of educational services to low-income students and the rural community, and of the achievements resulting from the cooperative arrangement in each of the participating institutions.

Allegany County Board of Education. Typing as a Motivational Factor and an Instructional Process in Educating Undereducated Adults in the Tri-County Region of Western Appalachian Maryland. Final Report. Cumberland, Md., June, 1970.

A project to develop an innovative system to recruit, motivate and retain the undereducated adult in the Western Marylaud region of Appalachia resulted in the finding that world-of-work skills did not prove any more adequate than regular ABE if instructional time was similar (100 hours). However, the electric typewriter did provide an ego-building device and rationale for attending classes.

Alschuler, Alfred and others. Achievement Motivation Development Project. Interim Report. Howard University, Cambridge, Massachusetts, February, 1969.

An attempt to discover what specific methods of arousing motivation are most effective for particular groups and to prepare instructional materials which will make the prototype achievement motivation course and motivational climates available to a wider number of educators.

American Institute for Research in Behavioral Sciences. Summer Upward Bound, Terre Haute, Indiana. Secondary Program in Compensatory Education. Palo Alto, California, 1969.

A description of the summer Upward Bound program in Terre Haute, Indiana. Students stayed in the program for three consecutive summers and were instructed in language arts, mathematics, study methods and techniques, and perceptual skills in order to encourage them to pursue a college education or post-secondary school training.

Anderson, Darrell and John A. Niemi. Adult Education and the Disadvantaged Adult. ERIC Clearinghouse on Adult Education, Syracuse, New York, April, 1969.

Examines the role of education in altering the personal and social characteristics of disadvantaged adults, based on research reports of remedial adult educational programs.

Antioch College. The Antioch New Directions Program. Yellow Springs, Ohio, April, 1970.

Describes plans to admit 80 low-income minority working class students each year, beginning in 1971, and to provide academic, personal and financial supportive services.

Associates for Research. A Self-Help Program for One Parent Households. Philadelphia, Pennsylvania, May, 1971.

This two-year project providing an adult education and clerical skills training program to welfare mothers resulted in GED attainment, Civil Service ratings and jobs superior to a control group taking a conventional secretarial training course.

Auerbach Corporation. An Impact Evaluation of the Work Incentive (WIN) Program. Vol. I, Major Conclusions and Findings; Vol. II, Data Analysis and Findings. Final Report. Philadelphia, Pennsylvania, September, 1972.

This evaluation of the WIN program focused on the characteristics and experiences of the enrollees before, during and after their participation in WIN, the degree to which they became economically self-sufficient, and the degree to which WIN contributed to that self-sufficiency.

Austin, John J. and D. A. Sommerfield. An Evaluation of Vocational Education for Disadvantaged Youth. Muskegon Public Schools, Michigan, 1967.

The results of a study of two main groups of youth trainees and non-trainees of the Muskegon Area Skill Training Center for disadvantaged youth. The authors seek to provide a model for measuring the effects of a program geared to train disadvantaged youth for employment.

Backer, Thomas E. Methods of Assessing the Disadvantaged in Manpower Programs: A Review and Analysis. Final Report. Human Interaction Research Institute, Los Angeles, November, 1972.

This report attempts to draw together what is known about assessment techniques for potential use with the disadvantaged in manpower programs. Many traditional paper-and-pencil tests are of limited use because disadvantaged persons do not have the reading skills, test wiseness or cultural experience necessary for valid and meaningful test performances. The report reviews the R & D efforts to devise assessment tools tailored

to the special needs of the culturally disadvantaged manpower program enrollee: some involve significant breaks from tradition, while others tailor the traditional format by modification of item content, test structure and directions.

Baker, Keith, Steven Haberfeld, John Irwin, Marjorie Seashore and Donald Leonard. Summary Report: Project Newgate and Other Prison Education Programs. Office of Economic Opportunity, April, 1973.

A comparison of Project Newgate and other prison education programs preparing inmates (during their last 1-2 years of incarceration) for college while still in prison by offering quality courses, academic and therapeutic counseling, and individualized attention, with Newgate providing a post-release program. More Newgate participants than other program participants were employed or in school after release and more indicated job stability; fewer Newgate participants reported drug or drinking problems following release; more Newgate participants continued their college education.

Baptiste, Hansom P., Jr. and Carmelita O. Meindl. An Answer to a Challenge: Innovation in University Curriculum. Indiana University, South Bend, 1971.

Discusses the development, implementation and evaluation of a first-year action program at Indiana University, South Bend, designed to prepare urban people for careers in education by raising their educational levels, providing them with a set of skills and creating on-the-job training that would lead to full-time employment.

Bard, Bernard. "A Place to Start," Southern Education Report, Vol. 3, No. 9, May, 1968.

Describes the efforts of the East Harlem Community and a New York City philanthropist to reopen the East Harlem Neighborhood Study Club, a storefront center providing study facilities, homework help and instruction in basic skills.

Barnes, H. and others. Manpower Development and Training Act Outcomes Study. Final Report. April, 1972.

Describes and analyzes data collected for a national random sample of 5,167 individuals trained in 1969 under the MDTA, with special emphasis on the changes they experienced in hourly wages, employment and annual incomes.

Beasley, Mary Catherine. Evaluation and Final Report for Soul City Expanded--An Experimental Demonstration Project for Adult Involvement. Final Report. University of Alabama, University, Alabama, October, 1972.

Evaluation of a three-year program to use the improvement of homemaking skills among disadvantaged families as a focus for a multidisciplinary approach to an adult basic education program and concerned with education, child-rearing patterns, improved homemaking skills, social acceptability, and employability.

Beck, Bertram M. and others. The Remedial Education Program. A Description of its Structure, Curriculum Design, Courses of Study and a Selected Sample of Tested Teaching Units. Columbia University, New York, Social

Work Research Center and Mobilization for Youth, Inc., New York, 1966.

A description of a program to help Neighborhood Youth Corps trainees overcome their deficiencies in English language skills, reading and mathematics and improve their capacity for problem solving and self-instruction.

Berea College. Student-Taught Adult Basic Literacy Efforts. Berea, Kentucky, September, 1972.

Student-Taught Adult Basic Literacy Efforts (STABLE), a program using college students to teach basic educational skills to adults in rural Appalachia, provided tutoring in small groups and in homes, using educational TV. Between August, 1971, and August, 1972, the 300 participants made significant progress: 60% of those studying math advanced a year or more during the spring term; 13 participants passed the GED test; 5 had been accepted by colleges and 4 were currently enrolled.

Berman, Mark L. "Improving the Performance of Culturally Disadvantaged Adult Students," Educational Technology, Vol. 8, No. 20, October, 30, 1968, pp. 16-18.

This research dealt with young adult Yaqui Indian and Mexican-American fourth grade drop-outs in Arizona and the development of techniques to attract them back to the classroom setting and maintain their attendance in the educational programs, as well as with the development of a contingency system to shape better performance.

Binsacca, Judy. Veterans Outreach: Suggestions for an Effective Outreach Program for Colleges. California University, Los Angeles, Western Center for Veterans Programs, 1973.

Methods and techniques that have been tried and found successful by a number of veterans' Upward Bound projects in the outreach programs are provided in this manual.

Blackwell, Paul Houston, Jr. Higher Education in Prison: A Study of the Impact of College Education Upon Selected Inmates of Draper Correctional Center, Elmore, Alabama. Ed.D. dissertation, Auburn University, 1973.

This study focused on the impact of college upon 28 student-inmates of Draper Correctional Center, Elmore, Alabama, after one year of study. While there was a significant increase in the cognitive ability of student-inmates--from a pre-test grade level mean of 10.19 to a post-test mean of 11.26 on the California Achievement Test--there was no significant change in their intellectual orientation and disposition.

Blankenburg, Richard. Step-Up: A Final Report. San Diego Community College, California, June, 1972.

Ten employers in the San Diego area participated in an ABE program for educationally disadvantaged employees by providing for on-site facilities and released time. Both unemployed and underemployed adults experienced educational and economic success as a result of the project.

Blume, Paul Rountree. An Evaluation of Institutional Vocational Training Received by American Indians Through the Muskogee, Oklahoma Area Office of the Bureau of Indian Affairs. Unpublished doctoral dissertation, Oklahoma State University, Stillwater, May, 1968.

A study of 672 Indians who received training from the Muskogee office between 1958 and 1966. Of the 220 trainees from whom post-test data

were obtained, findings indicated that receipt and completion of training resulted in a $1,929 average annual income increase, while the average annual increase in employment was 3½ months. The social benefit-cost ratio was 2.39.

Bobrow, William. An Examination of the Federal College Work-Study Program at Monterey Peninsula College. Master's thesis, the Monterey Institute of Foreign Studies, 1974.

An evaluation of the work-study program at Monterey Peninsula College revealed that the work-study students felt they were gaining skills and were learning, that supervisors felt they were providing training, and that employers felt the program was providing financial aid and a learning experience for the students as well as a supply of manpower for business and industry.

Bolino, August C. Occupational Education as a Source of Economic Growth. Catholic University of America, Washington, D. C., Department of Economics, November, 1972.

A report tracing the development of occupational education and recomputing labor productivity by adding in adult education, adult vocational education, apprenticeships, correspondence schools, Federal training programs, on-the-job training, private business schools and special schools.

Borus, M. E. and W. R. Tash. Measuring the Impact of Manpower Programs. Ann Arbor, Michigan: Institute of Labor and Industrial Relations, 1970.

A critical look at the designs for evaluation of program performance in the area of manpower training. Stresses the need to use more than a "univariate" criterion of success.

Bowlby, Roger L. and William A. Schriver. "Non-Wage Benefits of Vocational Training: Employability and Mobility," Industrial and Labor Relations Review, Vol. 23, July, 1970, pp. 500-509.

Results of a study of two groups, one of which had received Tennessee Area Vocational-Technical school training, the other having received no training beyond high school. The vocationally trained workers had higher mean labor-force participation rates, lower mean unemployment rates, and higher mean occupational mobility rates.

Boyd, Willie E. A Summary and Evaluation of Public Service Careers: Plan "B" (PSC-B). Office of New Careers (DHEW), Washington, D. C., 1972.

An analysis of 117 projects, Public Service Careers Plan B (PSC-B), designed to stimulate permanent employment opportunities for the disadvantaged and to upgrade existing low-paid workers in agencies receiving federal grants-in-aid.

Brandon, G. L. and M. Golden. "Research Visibility: Manpower Development/ Vocational Education for the Disadvantaged," American Vocational Journal, Vol. 45, 1970, pp. 41-56.

Comprehensive summaries of 16 research projects in the manpower area. Critical evaluation as well as descriptive information on each project.

Brown, Roy D. "Grooming Unemployables for Productive Life," American Vocational Journal, Vol. 45, March, 1970, pp. 53-55.

A description of "hard-hitting techniques" used in the MDTA program at the Sikeston, Missouri Public Schools, aimed particularly at the unmotivated student.

Buenaventura, Angeles. Follow-Up Study of MDTA E & D Project Conducted by the Michigan Catholic Conference, Lansing. March, 1967.

This program clearly demonstrated that 155 disadvantaged persons could be effectively trained and placed in occupations through a comprehensive treatment approach that included basic education, vocational training, cultural orientation and intensive counseling.

Cain, Glen C. Benefit/Cost Estimates for Job Corps. Discussion Papers. Wisconsin University, Madison, Institute for Research on Poverty, September, 1967.

A review of benefits to Job Corps trainees, measured by the educational gains achieved in conjunction with education and life time earnings, and by a comparison of wages earned by ex-Corpsmen with those of a comparable group of youth with no Job Corps experience.

Cairns, George F., Jr. Evaluation of the Youth-Tutoring-Youth Project, Summer, 1971. Atlanta Public Schools, Georgia, Research and Development Report, Vol. 5, No. 9, 1971.

An evaluation of a project conducted in the summer of 1971 in the Atlanta Public School System, directed toward attitude change of underachieving high school and elementary school students and toward change in basic language study skills of these pupils by using the Youth-Tutoring-Youth (YTY) model. Students were tutored for one hour each morning for ten weeks in reading and writing skills and for a second hour in mathematics skills. Pre-post testing of both tutors and tutees indicated that both the tutors and tutees gained valuable reading skills; some tutors gained as much as three years in reading skills.

California State Department of Education. Adult Basic Education in California. Progress Report. Sacramento, 1970.

A description of ABE programs in 64 California school districts and a qualitative evaluation of ten representative ones which enrolled about 7,500 adults during 1967-68. Training led to increased participation in voting, employment, promotion, removal from welfare, entrance into GED programs and the receipt of citizenship papers.

"Career Education: Equipping Students for the World of Work," Nation's Schools, Vol. 88, December, 1971, pp. 35-48.

"What has traditionally been known as vocational education is now becoming career education, and this special section explores the educational changes at the secondary and post-secondary levels necessary to make this transition."

Centanni, Frederick A. Task and Skill Analysis: A Methodology of Curricula Development for the Disadvantaged. Sylvania Electronic Systems, Waltham, Massachusetts, 1970.

A document outlining training and educational problems confronting

the trainee in private business and industry and recommending a methodology which can be used to develop the training/education approach.

Child Development Services Bureau (DHEW/OCD). Career Planning and Progression for a Child Development Center. Washington, D. C., 1973.

Described in this manual is a plan for the development and advancement of Head Start Program assistants through a sequence of career progression steps, with emphasis on groupings of tasks and course work for each level.

City University of New York, Research and Evaluation Unit for Special Programs. The College Discovery Program: A Synthesis of Research. March, 1969.

The first year of the CDP proved its feasibility: minority group enrollment was about 80% of the total CDP population, while fewer than 20% of regular students were from comparable deprived groups. Of the first two entering classes, 202 CDP students obtained their degrees at community colleges; 178 eventually went on to senior colleges.

Cohen, Bonnie R. and Ann H. Yonkers. Evaluations of the War on Poverty Education Programs. Resource Management Corporation, Bethesda, Maryland, March, 1969.

OEO-sponsored adult basic education programs are compared with HEW-sponsored programs: OEO programs were more expensive and more employment-oriented. The college admission and retention rates among Upward Bound enrollees indicated marked program success.

Cole, James L. The Application of Computer Technology to the Instruction of Undereducated Adults. Final Report. North Carolina State University, Raleigh, Adult Learning Center, October, 1971.

An investigation of the use of computers in instruction revealed that ABE students found the complexities of Computer Assisted Instruction (CAI) and Computer Managed Instruction (CMI) difficult to master and prone to produce anxiety.

College Entrance Examination Board. College Choices of Outstanding Black Students in Project Opportunity. Research and Evaluation Report No. 1972-6, Atlanta, Georgia, 1972.

This report of Project Opportunity, a guidance project which seeks to encourage greater numbers of minority/poverty students in the South to enter post-secondary institutions, found a strong relationship between Scholastic Aptitude Test (SAT) scores and the type of college chosen: integrated colleges were the overwhelming choice of superior black students.

College Entrance Examination Board. Post-Secondary Enrollment Patterns of Group III Project Opportunity Students. Research and Evaluation Report No. 1972-5, Atlanta, Georgia, 1972.

This report concerns 411 students, participants in Project Opportunity, who completed high school in 1972 at 11 centers in the South. About three-fourths of these students entered a post-high school institution, although a great majority came from a minority and/or poverty background, thus demonstrating that an intensive guidance program focusing on a selected group of young people can produce worthwhile results.

Comptroller General of the U. S. Effectiveness and Administration of the Collbran Job Corps Civilian Conservation Center. Collbran, Colorado, October, 1969.

This report of the effectiveness and administration of the Collbran Job Corps Civilian Conservation Center includes an evaluation of the basic education component. From a total enrollment of 94 corpsmen, 60 were graduated, but of these only 13 had acquired the 7.5 grade reading level and mathematics achievement goals.

Comptroller General of the U. S. Effectiveness and Administration of the Eight Canyon Job Corps Civilian Conservation Center. Mescalero, New Mexico, June, 1969.

This report of the effectiveness and administration of the Eight Canyon Job Corps Civilian Conservation Center includes an evaluation of the academic training component of the program. The 176 corpsmen who entered the program reading at the second grade level had advanced to an average grade level of 3.5 at the time of the review.

Comptroller General of the U. S. Effectiveness and Administration of the Kilmer Job Corps Center for Men. Edison, New Jersey, September, 1969.

This report of the effectiveness and administration of the Kilmer Job Corps Center for Men includes an evaluation of the basic education component which showed an average Stanford Achievement Test reading improvement for March, 1968 graduates of .47 and a mathematics improvement of .39.

Comptroller General of the U. S. Effectiveness and Administration of the Wellfleet Job Corps Civilian Conservation Center. South Wellfleet, Massachusetts, June, 1969.

This report of the effectiveness and administration of the Wellfleet Job Corps Civilian Conservation Center includes an evaluation of the basic education component. Instructed for two hours each day and after an average number of 231 days, 129 corpsmen improved an average of 2.0 grade levels in reading; with two hours daily instruction in math, 111 corpsmen improved an average of 5.3 grade levels in math after 251 hours. The degree to which gains were achieved was generally related to the length of time corpsmen stayed at the Center.

Comptroller General of the U. S. Opportunities for Improving Federally Assisted Manpower Programs Identified as a Result of Review in the Atlanta, Georgia Area. Report to the Congress. Washington, D. C., January, 1972.

All 1970 federal manpower programs in the Atlanta area were evaluated, with emphasis on outreach, eligibility, identification of needs and abilities, and screening for course assignment.

Comptroller General of the U. S. Opportunities for Improving the Institutional Manpower Training Program in South Carolina. Report to the Congress. Washington, D. C., 1972.

An assessment of institutional manpower training in South Carolina conducted at two skill centers, 10 state instructional centers and at public and private facilities throughout the state. About 72% of 9,800 trainees graduated and about 77% of the graduates were employed.

Comptroller General of the U. S. Problems of the Upward Bound Program in Preparing Disadvantaged Students for a Post-Secondary Education. Report to the Congress. Washington, D. C., March, 1974.

The General Accounting Office reviewed fifteen Upward Bound projects in Arizona, California, Florida, Georgia, Massachusetts, Nevada, New Hampshire, Rhode Island and Vermont. Although the program might be motivating students to enroll in college, the available data indicated that it apparently had not achieved its goal of equipping students with the academic skills and motivation necessary for success in college.

Connolly, John J. "New Careers: A Challenge to Adult Education," Adult Leadership, Vol. 21, No. 6, December, 1972, pp. 6, 187-8.

Describes a paraprofessional training program for the disadvantaged.

Conror, Thomas R. Prince Edward Island Newstart's Comprehensive Manpower Development System. Prince Edward Island Newstart, Inc., Montauge, February, 1971.

An outline of Newstart's approach to new methods of helping disadvantaged people gain employment. The ABE component was designed to allow any recruit to enter at any level from illiteracy and proceed in the program at his own pace to whatever level he may achieve up to grade 10.

Cory, Genevieve Hansen. The Relationship Between Televised Instruction and Cognitive Performance, Attitude Change, and Self-Reported Behavior Change in Sub-Groups with Varying Backgrounds and Characteristics. Thesis submitted to Stanford University, 1972.

Six groups of disadvantaged, unemployed adults in vocational training centers were measured for cognitive performance gains, attitude and self-reported behavior change after 16 half-hour TV programs, followed by discussions in consumer information. General conclusions: (1) community colleges can serve the disadvantaged using open-circuit TV; (2) televised instruction is acceptable to the disadvantaged; (3) courses should be short.

Costello, Mary. "Education for Jobs," Editorial Research Reports, Vol. 3, No. 17, 1971, pp. 845-62.

Contents: education and changing job market; academic vs. occupational instruction; new directions in career education; federal testing of proposals in career education

Cox, Robert P. A Study to Determine the Educational Interests of Adults in Sioux City, Iowa Who Did Not Complete High School. Ed.D. thesis, South Dakota University, Vermillion, Department of Secondary Education, August, 1965.

A study to locate Sioux City adults who had not completed high school and to relate their educational interests to the programming of adult education activities. The major motivation for adult education participation was to improve employment opportunities.

Coyle, H. F. and others. Project Total--To Teach All. An Inquiry Into the Development of a Model for Identifying Unmet Needs in Urban Post Secondary Educational Offerings. Final Report. Akron University, Ohio, Center for Urban Studies, December, 1973.

An attempt to develop a generalized model for analyzing urban adult

educational needs, with particular emphasis on the needs of the disadvantaged. An analysis of data collected during the 1973 winter-spring session found that the disadvantaged participated less than the nondisadvantaged in adult education courses and generally utilized job related programs.

Curry, Robert L. Adult Literacy--Progress and Problems. National Reading Conference, December, 1966.

Discusses the problems connected with the elimination of illiteracy in the United States. Past efforts to raise literacy levels are reviewed.

Dauzat, Sam V., Joann Dauzat and Loy Hedgepath. A Study of the Achievement Level Criteria for Nonveteran Adult Students' Eligibility for Taking the Test of General Educational Development in Louisiana. Louisiana State Department of Education, Bulletin No. 1267, 1974.

A study to determine whether the 13.0 overall achievement level (with no score below 12.0) on high school level achievement tests is an appropriate criterion for screening adult students seeking to take the GED test. It was found that sample senior students in Louisiana secondary schools did not meet the criteria for GED testing in any category and that a GED diploma should, therefore, not be considered sub-standard but rather should vouch for the academic excellence of the GED graduate.

Decker, Floyd A. and others. Municipal Government Efforts to Provide Career Employment Opportunities for the Disadvantaged. National League of Cities, Washington, D. C., Department of Urban Studies, December, 1969.

A study, conducted in Dayton, Detroit, El Paso, New York, San Francisco and Washington, D. C., investigating efforts to create municipal career employment and training opportunities for those who cannot meet traditional entrance requirements. Most supervisors and other employers expressed satisfaction with trainee attitudes and performance.

DeCrow, Roger. "New Learning for Older Americans: An Overview of National Effort." A report prepared for the Adult Education Association, in Behavior Today, Vol. 6, No. 16, April 21, 1975.

Many schools provide basic education, but few older adults receive help, though literacy problems are concentrated in the older generation. DeCrow suggests experiments to build learning into all services for older people; fuller use of informal adult education agencies; information sharing services, research and development (especially in projects for the reading handicapped and the disadvantaged); national priority planning to sustain a large, emerging education movement; and engaging more older people themselves as volunteers and leaders in learning.

Delgiorno, Joseph E. "A School for Out-of-School Youth," Personnel and Guidance Journal, Vol. 48, No. 5, January, 1970, pp. 394-96.

Describes the Oceanside, New York Technical School to assist alienated youth in achieving financial and emotional independence. A number of the students earned GED diplomas, some earned regular high school diplomas and many obtained jobs, but the most important result was the clearly visible change in the lives of many enrollees. They developed a will to succeed and confidence in their ability to do so. Anti-social attitudes were modified and considerable improvement in appearances was effected.

Demartinis, Ernest and Ruth Demartinis. "The Disadvantaged Adult and Continuing Education," Journal of Continuing Education and Training, Vol. 2, No. 1, August, 1972, pp. 1, 23-7.

Describes the need for more effective counseling and specialized educational programs in order to alter the personal and social characteristics of the disadvantaged adult.

Detroit University, Center for Continuing Education Research. Report on a Basic Adult Education Demonstration Program. Detroit: Wayne County Bureau of Social Aid, Work Experience Program, 1965.

A comparison of the Initial Teaching Alphabet (i/t/a) program and a Traditional Orthography (t.o.) method showed that i/t/a facilitates the teaching of reading to illiterate adults, while t.o serves better for those with pre-instruction achievement levels of 4th grade or higher.

Devlin, Laurence Errol. Participation in Adult Education and Occupational Mobility. Ph.D. dissertation, University of Chicago, Department of Education, September, 1970.

An inquiry which stresses the positive relationship between participation in adult education and occupational mobility and which notes that such participation also contributes to the allocation of talent on the basis of ability.

Dick, Walter. An Overview of Computer-Assisted Instruction for Adult Educators. Florida State University, Tallahassee, Computer-Assisted Instruction (CAI) Center, October, 1969.

An introduction to computer-assisted instruction for persons working in adult basic education, including an evaluation of a tutorial CAI program and a discussion of CAI hardware and implementation.

Dickinson, Gary. Research Related to Adult Education Conducted at the University of British Columbia. British Columbia University, Vancouver, December, 1968.

An annotated bibliography of University of British Columbia research relating to adult education, dealing with such topics as agricultural extension, literacy education, community development, leadership training, evening classes and their clientele, correspondence study, vocational and technical education, age differences in adult learning and educational methodology.

Dinges, Rodney F. The Effectiveness of a Tutor-Student (One-to-One) Method of Teaching Reading to Functionally Illiterate Inmates at the Illinois State Penitentiary, Menard Branch, Menard, Illinois. American Bar Association Commission on Correctional Facilities and Services, American Correctional Association and National Association for Public Continuing and Adult Education, Washington, D. C., 1975.

A monograph evaluating a tutor-student (one-to-one) teaching method with adult prisoner inmates showed that reading levels were significantly increased after 50 one-hour lessons and that reading levels were further increased after 25 additional hours of individualized instruction with flash cards.

Doeringer, Peter B. and Michael J. Piore. Internal Labor Markets and Manpower Analysis. Lexington, Massachusetts: Heath Lexington Books, 1971.

The long-run increase in the average educational attainment required for hiring may not necessarily reflect a change in job content but may rather indicate that education is used as a device to select a group of people who are thought to possess a common set of attitudes and behavioral traits. As educational attainment continues to rise, it will be necessary to increase educational requirements in order to draw from the same stratum of the labor market.

Dornish, J. Robert. A Study of the Effectiveness of ITV as a Supplement to Face-to-Face Teaching of Functional Illiterates. Ed.D. thesis, Lehigh University, Bethlehem, Pennsylvania, 1969.

Compares an ABE program using instructional television (ITV) with similar programs without ITV. No significant differences in achievement gain were found, although younger adult illiterates made greater gains than their older classmates.

Drake, James Bob and Alice S. Morgan. A Career Decision Making Model Utilizing Adult Basic Education and Counseling for the Under/Unemployed Adult and Family. Final Report. Department of Vocational and Adult Education, School of Education, Auburn University, Auburn, Alabama, July, 1974.

This Huntsville, Alabama program was designed to help the disadvantaged adult (1) upgrade himself educationally, (2) make a realistic career decision, and (3) determine the best route to reach his selected career. Of a total of 4,690 adult learners served--some in a Learning Center, others in a mobile unit instructional van--555 ABE enrollees passed the GED test.

Edgar, Thomas. Evaluation in Adult Basic Education. Heuristics of Adult Education: Courses of Study for Professional Preparation of Educators of Adults. Colorado University, Boulder, June, 1970.

Outlines a course in evaluation techniques for ABE teachers. Topics include: (1) the meaning of evaluation in ABE; (2) the relationship between objectives, teaching and evaluation; (3) examinations based on teaching-learning units; (4) utilization of standardized instruments; (5) comments on methodology and media; (6) student projects, practicums and field experience; (7) a design for supervision, critique and evaluation of practical field experience.

Educational Computer Corporation. SNAP/SMART II. Final Report. Radnor, Pennsylvania, April, 1972.

Trainees with low reading achievement (0 to 4th grade levels) were recruited, tested and selected for training in auto mechanics, appliance repair service, heating services and electronics. A work simulation device, the SMART simulator, was employed to help overcome the traditional training program reliance on printed textbooks while concurrently teaching remedial reading and mathematics to upgrade basic skills.

Educational Projects, Inc. These Things Have Worked--Materials Drawn from the Experience of Upward Bound Projects, 1966-67. Washington, D. C., 1967.

A description of the experiences of successful Upward Bound Projects for disadvantaged high school students compiled from the reports of the colleges and universities who conducted the projects. Comments on language

arts, mathematics and money management and communication skills projects, as well as social studies instruction and social issues and the sciences.

Egerton, John. Higher Education for High Risk Students. Southern Education Foundation, Atlanta, Georgia, April, 1968.

A survey of efforts by colleges and universities to enroll high risk students. Questionnaire responses from 18 institutions indicated the nature, extent and variety of approaches and recruitment procedures of their programs. The report also includes descriptions of outstanding programs.

Egloff, Marjorie. The Neighborhood Youth Corps: A Review of Research. U. S. Department of Labor, Manpower Administration. Washington, D. C.: U. S. Government Printing Office, 1970.

This review consists of a summary and analysis of the NYC studies and a brief comment on the individual programs.

El Centro College. Project Evaluation of El Centro/Dallas County Jail Educational Program. Texas Criminal Justice Council, Dallas, Texas, 1975.

Describes an educational rehabilitation program implemented by El Centro College, to offer college level courses and counseling to short term county jail prisoners and to offer behavioral science courses to both student/inmates and custodial officers in an effort to reduce recidivism and improve inmate/staff understanding. Pastrak developmental courses--45 hours over a period of six weeks--were used in math, reading, and writing instruction.

Ellard, Charles John. An Investigation of the Influence of the In-School Neighborhood Youth Corps on Employment and Earnings in Houston, Texas. Final Report. Ph.D. dissertation, Houston University, Department of Economics, April, 1974.

A study investigating the post-high school influence of the In-School NYC on the earning capacity of participants in Houston, Texas. Among the conclusions: (1) NYC participation does not improve the high school graduation rate; (2) the NYC influence on post-high school income is questionable; (3) the NYC influence on college attendance and long-run income prospects is questionable; (4) NYC participation benefits blacks more than other ethnic groups; (5) the school year segment contributes more toward high school graduation than the summer-only segment; (6) income gains to NYC participants do not increase with the length of participation.

Erwin, Kate. "New Careers," American Education, Vol. 4, May, 1968, pp. 20-22.

A description of the New Careers program in Winston-Salem, North Carolina to prepare low income groups for skilled jobs relating to human services.

Eyster, George W. Recruiting Disadvantaged Adults. Morehead State University, Appalachian Adult Education Center, Morehead, Kentucky, May, 1975.

A guide which recognizes that undereducated adults need information and services to help solve problems, that the public library can meet those needs through adjustments in procedures and interagency cooperation,

and that the materials and services required for disadvantaged adults are useful and useable for all adults.

Falk, R. F. and others. The Frontier of Action: New Careers for the Poor. A Viable Concept. Minnesota University, Minneapolis, 1969.

Deals with paraprofessional training for poverty adults in Minneapolis. Considers enrollees' mobility orientations, their effectiveness in social service agencies, the effect of higher education on their lives and job performance.

Feingold, S. Norman and others. Resources: Recommendations for Adult Career Resources, Supplement. B'nai B'rith Career and Counseling Services, Washington, D. C., July, 1975.

A compendium of career materials that may be used in adult education courses to help the interested adult student become more familiar with a wide range of careers.

Ferguson, John L. and others. A Survey of Adult Basic Education in Missouri, 1965-1969. University of Missouri-Columbia, College of Education, August, 1969.

Surveys of the State Office of ABE and of local program characteristics as well as a follow-up study of enrollees over age 25 with less than eight years of schooling who terminated during 1967-68.

Ferguson, L. G. Multi-County Assessment of Adult Needs Project (MAP), Phase I, Survey of Adults, Phase II, Business and Industry. McLennan Community College, Waco, Texas, June, 1975.

These two reports describe surveys and assess the felt and perceived needs and interests relative to education and training of the adult population and of the business community in the four-county area surrounding Waco, Texas.

Flicker, Bernard. A School and Work Program in an Adult Manpower Setting for Potential Dropouts Needing Educational Redirection. New York: Center for Urban Education, 1969.

A description and evaluation of a cooperative school-work project conducted in New York City (1968-69) under MDTA.

Ford Foundation, New York, Greenleigh Associates, Inc., New York, and OEO, Washington, D. C. A Pilot Study of the Opportunities Industrialization Center, Inc. (OIC) of Philadelphia, Pennsylvania. August, 1967.

This pilot study examines administrative structures and functions, program components, participant characteristics, relationships with employers, employment services, and the impact of the program's self-help philosophy on trainees during training and after placement.

Francis, William V., Jr. "Prisoners Learn to Read for Better Life on Outside," Kansas City Times, Thursday, November 7, 1974, p. 1, 14.

Describes a beginning reading program developed by a University of Missouri-Kansas City reading specialist, in which 20 student inmates and 20 tutor inmates attempt to overcome functional illiteracy and enable them to read, write letters and prepare for life after release.

Freeberg, N. E. Development of Evaluative Measures for Use with Neighborhood Youth Corps Enrollees. U. S. Department of Labor Contract No. 66-00-09. Princeton, New Jersey: Educational Testing Service, December, 1968.

Describes the development of a set of evaluative measures specifically tailored to disadvantaged blacks between fourth and sixth grade reading levels. High reliability ratings were found for most of the 13 tests.

Freire, Paolo. Education for Critical Consciousness. The Seabury Press, New York, 1973.

This work, stressing humanism and the democratization of culture, identifies the political and economic roots of alienation and advocates that literacy training take into account the conditions which undereducated adults must confront each day.

Geeslin, Robert Hawk. The Field Test of a Material for Teaching Reading and the General Knowledge Area of Adult Basic Education: An Experimental and Descriptive Study. Ed.D. thesis, Florida State University, Tallahassee, 1969.

A field test of experimental multi-level ABE materials found no significant differences in student achievement from those using traditional materials. Teachers, teacher-trainees and experts, however, tended to rate the experimental materials more favorably than any of the traditional materials.

General Electric Company. Analysis of Seven Special Projects in Adult Basic Education. Final Report. Washington, D. C., November, 1969.

Summarizes innovations in seven special ABE projects. Project elements of national significance are identified and the project settings are described. A framework for project review is offered, followed by conclusions and recommendations. Of special interest is the finding that the total cost per grade year per ABE enrollee was approximately $150 without a recruitment effort, compared with approximately $102 per grade year per enrollee with a recruitment effort.

Geoffray, Alice R. Secretarial Training with Speech Improvement, An Experimental and Demonstration Project. Final Report. Saint Mary's Dominican College, New Orleans, Louisiana, 1966.

Ninety disadvantaged white and Negro female trainees, ages 18 to 44, were given 950 hours (over a 24-week period) of instruction in typing, shorthand, business speech and ancillary courses. The evaluation showed that such training increased employability for almost all of the trainees: of the 86 who completed the course, 97% were employed in business offices

George Washington University. [illegible]arning Abilities of Disadvantaged Adults. Alexandria, Virginia, Hum[illegible] Resources Research Office, March, 1969.

A summary of literat[illegible] concerned with the learning abilities of disadvantaged adults showed no definitive evidence to suggest that they have any less ability to learn than other adults.

Goldstein, Jon H. The Effectiveness of Manpower Training Programs: A Review of Research on the Impact on the Poor. Studies in Public Welfare, Paper No. 3. Joint Economic Committee, Washington, D. C., November, 1972.

Reviews the evidence on the impact that manpower training programs have had on the earnings of the poor between 1963 and 1971.

Gordon, Edmund W. and Charles L. Thomas. Brief: A Study on Compensatory Collegiate Programs for Minority Group Youth. Columbia University, New York, Teachers College, 1969.

Describes an attempt to compile data on existing programs and establish a rapid monitoring system to disseminate relevant information to institutions engaged in or planning compensatory programs for minority group youth, as well as to assess the effectiveness of such programs and determine to what extent they have influenced the personal, social and academic adjustments of students.

Gordon, Edmund W. and Doxey A. Wilkerson. Compensatory Education for the Disadvantaged, Programs and Practices--Preschool through College. College Entrance Examination Board, New York, New York, 1966.

A description and directory of specific compensatory education programs, with analysis and critical evaluation. Subjects discussed include the status of compensatory education, innovative programs and patterns, problems of evaluation, and guidelines for conducting compensatory programs.

Gordon, Michael E., Richard D. Arvey, William C. Daffron, Jr., and Dennis L. Umberger. "Racial Differences in the Impact of Mathematics Training at a Manpower Development Program," Journal of Applied Psychology, Vol. 59, No. 3, June, 1974, pp. 253-58.

Describes the impact of mathematics instruction on the measured numerical competence of 80 black and 83 white trainees. The California Achievement Test scores, administered at six-week intervals over a period of six months, showed a significant Race X Training interaction which indicated that whites profited more from the instruction than did the blacks. These findings imply that racial differences in measured mathematical competence are not reduced by training, but may in fact be increased.

Granick, Len and Frederick Strodtbeck. An Evaluation of the Youth Tutoring Youth Model for In School Neighborhood Youth Corps. National Commission on Resources for Youth, Inc., New York, New York, December, 1972.

Describes a field experiment in Chicago and Washington, D. C. to determine what improvements occur in the school life of underachieving children when the older of them (ages 14-17) are paid a stipend to tutor the younger ones (ages 6-11). Results indicated that tutors and tutees achieved improved language skills, more positive self-image, and increased interest in going to school.

Greenleigh Associates, Inc. Adult Basic Education in Maryland. An Analysis of ABE Program Efforts on the State and Local Level. New York, April, 1970.

This field study found that (1) only 3% of educationally disadvantaged groups participated in ABE and less than 1% achieved an eighth grade level education; (2) inconsistencies were noted between actual procedures and stated policies; (3) the ABE unit of the State Department of Education was grossly understaffed; (4) unclear policy decisions made innovation difficult; (5) local ABE programs vary widely due to inadequate planning, commitment and direction. Twenty specific recommendations are made.

Greenleigh Associates, Inc. Educational Rehabilitation: An Evaluation of the Adult Basic Education Program of the State of Illinois. New York, 1965.

This study is the result of interviews with students, teachers, caseworkers, principals and head teachers in ABE programs in five counties of Illinois. Four of the 20 recommendations: (1) local school systems should place high priority on replacing evening programs with day programs; (2) local school personnel must carefully evaluate the educational potential of ABE students and develop special classes for the retarded and for those with special learning problems; (3) specific criteria to assist in better teaching selection are needed; (4) all new students should have a physical examination (vision, hearing) before entering the ABE program.

Gubins, Samuel. The Impact of Age and Education on the Effectiveness of Training: A Benefit/Cost Analysis. Ph.D. thesis, Johns Hopkins University, Baltimore, Maryland, 1970.

Using a sample of trainees from the Maryland State Employment Services, benefits and costs were computed and revealed that MDTA was economically efficient and that there was significantly higher payoff for trainees with under nine years of education and for those over age 21.

Gwin, Ann. A Demonstration of the Interrelating of Library and Basic Education Services for Disadvantaged Adults. Final Report, Alabama Model Center. Morehead State University, Kentucky, Appalachian Adult Education Center, June, 1973.

A description and analysis of a project to link the services of adult education and libraries with approximately 400 adults in Birmingham and Jefferson Counties, Kentucky.

Haddon, A. M. and W. J. Jacobs. "Men's Job Corps: A Total Program of Human Renewal," Audiovisual Instruction, Vol. 13, February, 1968, pp. 141-43.

What the Job Corps has done to fulfill its original goals of increasing the employability of its enrollees and providing them with the tools for good citizenship, emphasizing the reading and speech courses offered to enhance job skill levels.

Hampton, Leonard A. "The Neighborhood Continuing Education Program of Savannah, Georgia," Continuing Education, Vol. 5, No. 3, July, 1972, pp. 8, 58-60.

Several institutions of higher learning combined their efforts and resources to develop a neighborhood program that would reach the disadvantaged in the Savannah Model Cities area.

Hanberry, Gerald C. and Arnold Dahlke. Project TUNE in Transition: Second Year Independent Evaluation (July 1, 1973-June 30, 1974). Philadelphia, Pennsylvania, September, 1974.

An evaluation of TUNE (The Temple University Neighborhood Extension), a program designed to involve a major urban university in the life of the people who live in the inner city and to develop a non-traditional approach for education and schooling (in reading, math and language arts) for adults at the high school level, all keyed to the GED exam.

Harris, Michael H. Narrative Evaluation Report on the Kentucky Right to Read Institute. University of Kentucky, Lexington, School of Library Science, 1972.

Discusses the problems and advantages of the Kentucky Right to Read Institute and the ways in which libraries and schools might serve the Right to Read concept.

Harrison, D. K. Prevocational Training for the Hard-to-Employ: A Systems Approach. Perspective on Training the Disadvantaged: The Hard-to-Employ. Personnel Services Review, Series 2, Department of Health, Education and Welfare, Contract No. OEC-3-6-002487-1579-(010). Ann Arbor, Michigan, May, 1970.

Describes a training program using a systems approach to tailor activities to the specific needs of disadvantaged job applicants.

Harwood, Edwin and Robert Olasov. Houston's Out-of-School Neighborhood Youth Corps: A Comparative Observational Study of the NYC's Impact on the Work Attitudes and Job Futures of Poverty Youths. Rice University, Houston, Texas, Department of Anthropology and Sociology, October, 1968.

Statistical data gathered from NYC sponsors' reports and from trainees' personal folders showed that (1) few males are in the program because they can earn more money in unskilled and semi-skilled jobs; (2) more females are in the program because they cannot compete for the better paying semi-skilled jobs; (3) remedial education has been a failure.

Haskell, Mark A. The New Careers Concept: Potential for Public Employment of the Poor. Praeger Special Studies in U. S. Economic and Social Development Series, 1969.

Examines labor supply and demand factors in the health field and municipal hospital system in New York City, and the relevance of the New Careers Concept to these factors. Some of the specific applications are examined and evaluated on the basis of their accomplishments and the applicability of the new careers concept in other city agencies is examined.

Heding, Howard W. Missouri Adult Vocational-Literacy Materials Development Project. U. S. Office of Education Project #034-65, Columbia, University of Missouri, 1967.

Report of a study designed to examine the effectiveness of materials developed at three levels of difficulty to provide a transition from Initial Teaching Alphabet (i/t/a) to Traditional Orthography (t.o). Although student gains after 90 hours of instruction were negligible, the study represents an attempt to evaluate the effectiveness of materials developed for a specific purpose with a specific group.

Henning, John. "Preparation for the World of Work," in Manpower Development in Appalachia: An Approach to Unemployment, Frederick A. Zeller and Robert W. Miller (Eds.). New York: Frederick A. Praeger, 1968.

An Under Secretary of Labor calls for more adequate integration of Federal efforts with those of all institutions and agencies working in the manpower development field and suggests that the educational institutions be made more relevant to the world of work and more responsive to the problems of dropouts.

Heppell, Helen. Community Education Project. A Report to the Rosenberg Foundation. San Diego High Schools, California, June, 1966.

A report of a three-year community education project in southeast San Diego which included creative recruitment and motivational techniques, a meaningful curriculum, encouragement of library use and home calls by volunteers. There was a steady rise in adult school attendance and a steady increase in certificates and diplomas issued by the school.

Higher Education Development Fund. Manpower Education Monograph Series, Volume II: Curriculum Design. New York, New York, July, 1972.

Provides a documentation of the College Adapter Program curriculum which successfully linked comprehensive educational services and manpower objectives. Includes suggestions on how to select and utilize course materials, how to utilize homework assignments, testing procedures and grades and how to select skill objectives for language arts, mathematics and science.

Higher Education Development Fund. Manpower Education Monograph Series, Volume III: Tutoring Center and High School Equivalency Preparation. New York, New York, July, 1972.

Presents practical suggestions for methods to design an inclusive tutoring center, all of which have proven successful in the College Adapter Program, and models that can be adapted to other programs, as well as suggestions for providing a relevant GED program.

Higher Education Development Fund. Manpower Education Monograph Series, Volume IV: Administration and Counseling. New York, New York, July, 1972.

An examination of the administrative procedures and design for an effective manpower education component and of the vocational counseling required in such a component.

Hoffman, N. March. Follow-Up Study of MDTA E & D Project at Bluefield State College. Bureau of Social Science Research, Inc., Washington, D. C., May, 1967.

An evaluation of a project for 85 disadvantaged persons in Bluefield, West Virginia indicated that skill-training, basic education and job placement had little impact on increasing the incidence of employment due in part to inadequate funding, training facilities, and time.

Hogan, Robert T. and Robert B. Horsfall. An Evaluation of a High School Tutorial Program. Johns Hopkins University, Baltimore, Center for the Study of Social Organization of Schools, July, 1970.

Evaluates a summer tutorial program for 40 sixteen-year-old boys (28 in control group) which emphasized reading and math plus art and physical education. The experimental group showed a more positive attitude, though no difference in scholastic achievement; after high school, 82% of the tutorial group, only 18% of the control group entered college.

Hoos, Ida R. "Retraining of the Underprivileged--the Job Corps and Programs for Welfare Recipients," in Retraining the Work Force, Ida R. Hoos. Berkeley: University of California Press, 1967.

Assesses the Job Corps curriculum and facilities for basic orientation

and education of unemployed, disadvantaged, poorly motivated youth and reviews training programs for welfare recipients in Santa Clara and Alameda Counties, California.

Howard, Jack and others. The Neighborhood Youth Corps--Help or Handout. National Committee on Employment of Youth, New York, 1967.

The successes and failures of the NYC are discussed, with special emphasis on the program's record in decreasing dropouts and juvenile crime and in improving school performance, hiring practices and continuing education.

Howe, Harold, II. Changing the Pecking Order. Paper presented before College Entrance Examination Board, Chicago, Illinois, October, 1967.

Deals with the need to combat the current inflexibility of business and colleges in wanting to use only "credentialed" people. Suggests a continuation of Upward Bound and Talent Search, an emphasis on talent and ability rather than academic records, compensatory courses to facilitate admissions and the accreditation of experience.

Hull House Association. Final Report: Work Kamp. Chicago, Illinois, 1968.

This Work Opportunity Readiness Kamp, located 100 miles from Chicago, demonstrates that a work-oriented, residential, prevocational training program can prepare high-risk, older teenagers for placement in a work, school or manpower program at a reasonable cost.

Inventory of Federally Supported Adult Education Programs. Report to the President's National Advisory Committee on Adult Basic Education, January, 1968.

Thirty-four federal programs concerned with adult basic education are described and evaluated. There are also brief descriptions of programs in 13 cities and states. Noted is the scarcity of programs in relation to reported needs (18 million require ABE, only 400,000 are receiving it), the lack of a national policy; the limited availability of funds needed for experimentation in curriculum building; the need to slot those completing GED into skill-training programs such as CEP.

Janger, Allen R. "Employing the High School Dropout," The Conference Board Record, Vol. 5, No. 8, August, 1968, pp. 9-18.

Describes experimental programs offered by the Equitable Life Assurance Society since 1962 aimed at employing the hard-core high school dropout. After the lack of basic education was shown to be a major handicap, Equitable employed a non-profit organization to set up basic education classes designed to give experience leading to an entry level job at the end of one year.

Jarmin, Harl R. and Richard J. Stranges. "Academic Level of Poverty Program Enrollees: A New Look," Journal of Employment Counseling, Vol. 9, No. 4, December, 1972, pp. 175-179.

The Adult Basic Learning Examination (ABLE), administered to enrollees in a Concentrated Employment Program, found that trainees obtained higher scores on the language skills than in computational areas. The suitability of ABLE as a screening instrument for poverty programs is discussed.

Jhin, Kyo R. and Murry Gregg. Top of Alabama Regional Education Service Agency (TARESA) Adult Secondary Education Program. Huntsville, Alabama, n.d.

A report describing the TARESA program to provide high school equivalency opportunities to needy adults in five northeastern Alabama counties. Of the 1,400 enrollees, a total of 561 had successfully completed the GED test and received a high school certificate by June, 1974. Needs, objectives, procedures and evaluations are tabulated.

Johnson, Louise A. Follow-Up of MDTA E & D Project Conducted by Tuskegee Institute. Tuskegee, Alabama, May, 1967.

Data gathered on a project designed to provide basic education, job training, counseling and job placement for 180 disadvantaged Negro males between June, 1964 and May, 1965, at Tuskegee Institute showed, among other outcomes, a high level of occupational competence which was reflected in high rates of employment, training-related employment and after-training wage levels.

Johnston, Joyce D. "The Reading Teacher in the Vocational Classroom" Journal of Reading, Vol. 18, No. 1, pp. 27-29.

Reports on a reading teacher and cosmetology instructor working together in a vocational-technical school to develop a practical procedure for reading instruction in a content area.

Jones, Roland. A Demonstration of the Interrelating of Library and Basic Education Services for Disadvantaged Adults. Final Report, Kentucky Model Center. Morehead State University, Kentucky, Appalachian Adult Education Center, June, 1973.

This ABE-initiated coordination of library and adult education services in Floyd County, Kentucky, demonstrates the possibilities of such services to rural disadvantaged, under-educated adults.

Jordan, Daniel C. "Evaluation of Upward Bound," Teachers College Journal, Vol. 38, No. 4, January, 1967.

The Upward Bound program at Indiana State University, Terre Haute, was the subject of this special issue. The evaluation section notes that 61 students who participated in an eight-week summer program showed an average gain on all batteries of the Differential Aptitude Test of 12 percentile ranks and significant gains in a positive direction in self-image.

Kansas City School District, Missouri. Special Project for Coordinated Adult Basic Education, 1968-69. Final Report. Department of Extended Services, 1969.

Seven hundred twenty-three participants were recruited through CEP, Work Incentive, MDT and the Kansas City School District's Department of Extended Services. Best instructional success was achieved when students participated in planning a curriculum which related to everyday life. New media were tested and found most effective as reinforcement; teacher creativity was found to be of great importance.

Kaplan, Jerome. Homemaker-Health Aide Training Project. Final Report. Mansfield Memorial Homes, Inc., Ohio, September, 1967.

A social worker and a professional nurse attempted to train eleven

participants, within the setting of a geriatric center, in homemaker and health aide skills. Eighty-two percent completed the course and 73% were subsequently employed in the health field.

Kass, David and Max U. Bildersee. The Savin Story. The PAL-JOEY Project, New York, December, 1966.

An on-the-job training program, a project of MDTA, with the Savin Business Machine Company, saw six of the nine who began the program complete it and obtain permanent employment with the company.

King, Gordon A. and Timothy F. Regan. System for Interagency Coordination in Adult Education. November, 1969.

An innovative system to facilitate interagency cooperation in 16 federal agencies concerned with ABE is described. Findings on a field survey of 12 local programs: (1) there is at present no clear national policy for ABE; (2) there is at present no universally acceptable definition of ABE; (3) target populations for ABE programs are unclear; (4) there is at present only minimal connection between ABE programs; (5) there is at present little research or teacher training in other-than-USOE programs; (6) there is at present a lack of standard evaluation and statistical reporting procedures in ABE programs.

Kolberg, William H. "Upgrading the Working Poor," Manpower, Vol. 1, No. 10, November, 1969, pp. 24-27.

In a discussion of upgrading the author states that while up to now most programs have been directed to training the unemployed for entry-level jobs, what is needed today is a type of training that combines work and education and that should be available to older workers as well as youths.

Krebs, Annette B. The Adult Literacy Project: A Study of Varied Educational and Operational Research in the Training of Functional Illiterate Adults: An Interim Report. Waltham, Massachusetts: Brandeis University, 1966.

This report describes an action-research effort to examine the effectiveness of a small group programmed approach and an eclectic, volunteer tutor approach to teaching reading skills to illiterate adults.

Lachica, Genaro and Daniel Tanner. Discovering and Developing the College Potential of Disadvantaged High School Youth, the College Discovery and Development Program. A Report of the First Year of a Longitudinal Study. City University of New York, Division of Teacher Education, June, 1967.

A summary of the first year of the College Discovery and Development Program to identify disadvantaged and underachieving ninth graders and to develop their college potential in special high school development centers.

Laird, Claud Alton. A Study of the College Level Educational Program of the Texas Department of Corrections. Ed.D. dissertation, University of Houston, 1971.

This study reported on the status of college level education for 305 inmates within the Texas Department of Corrections and compared the achievement of these students with that of 364 students on the Lee College campus,

Baytown, Texas. There were no significant differences when comparing the final exam grades of the two groups.

Larry, R. Heath. "Putting Steel in the JOBS Program," Manpower, Vol. 13, No. 10, October, 1971, pp. 6-10.

The JOBS program operated by United States Steel has trained nearly 5,000 participants in two years, 73% of whom have completed their training. The program, nine weeks of training center activity plus a transitional week of work, also includes 160 hours of classes in job-related basic education, as well as an 80-hour vestibule training period with job-related equipment.

Learn and Earn Work Training Program. Work Training Program, Final Report, December, 1964-August, 1967. Santa Barbara, California, 1967.

An evaluation of the Work Training Program, Inc., a non-profit California corporation administering programs to help impoverished people help themselves. The program was generally successful due to its flexibility and the emphasis on self-respect, worth and dignity of the individual.

Legge, A. J. W. "Katesgrove House--A Collective Experiment in Helping the Disadvantaged," Adult Education (London), Vol. 46, No. 6, March, 1974, pp. 377-82.

Describes the successful development of a special homemaking, hygiene and counseling program for urban disadvantaged adults, emphasizing communication and cooperation among several agencies.

Levitan, Sar A. Antipoverty Work and Training Efforts: Goals and Reality. Policy Papers in Human Resources and Industrial Relations No. 3. Michigan University, Ann Arbor, Institute of Labor and Industrial Relations, National Manpower Policy Task Force, Washington, D. C., 1967.

A review of the Job Corps, NYC, and Work Experience and Training programs between 1964 and 1967. It was generally concluded that it is doubtful whether the programs have achieved the formal goals of economic self-support.

Liebhafsky, E. E. Personal Characteristics and Training of the Disadvantaged. University of Missouri-Columbia, School of Business and Public Administration Research Center, January, 1971.

This study in the St. Louis area found that neither analysis of personal characteristics nor analysis of attitudes toward training permitted identification of reasons explaining either noncompletion or dropping out of school. It found, however, that the training programs in the St. Louis area were effective in improving the employability of disadvantaged trainees and that persons who completed training were most likely to find and hold training-related jobs.

Lindskoog, Howard N. Operation Relevance: A Pilot Project Conducted in Cooperation with the Economic and Youth Opportunity Agency and the County of Los Angeles. Los Angeles: California University, Institute of Adult Basic Education, 1970.

Conducted in 1969, this intensive 13-week project was designed to

demonstrate effective methods of ABE for 50 hard core unemployed males working in the Los Angeles County Highway Department. Instructional emphasis was on the acquisition and development of basic computation and communication skills, taught by a teacher, a teacher counselor and three aides; attempts were also made to motivate participants to seek and hold gainful employment. The program was judged relatively successful, but the need was seen to meet trainee needs outside the educational system.

London, Jack and Robert Wenkert. "Obstacles to Blue-Collar Participation in Adult Education," in Blue Collar World, Arthur B. Shostak and William Gomberg (Eds.). Englewood Cliffs, New Jersey: Prentice Hall, 1965.

A study in Oakland, California found that lower class feelings of being too old or tired, fear of failure, negative pressures from peers, and an unawareness of educational opportunities and organizations sponsoring activities were among the causes of low participation in adult education programs.

Lowe, A. J. An Evaluation of a College Reading Program. University of South Florida, Tampa, 1970.

Examines a 15-week college reading improvement program (CROP) for 65 freshmen at the University of South Florida. Pre-testing showed these students to be significantly inferior to the rest of the freshmen; post-program grades suggested that most of the students benefitted from their participation.

MacDougall, Allan. Disadvantaged-Handicapped Identification and Supportive Service Delivery System, Southwestern College, Spring, 1974. Southwestern College, Chula Vista, California, August, 1974.

A system of identification and notification designed and implemented at Southwestern College to speed supportive services to the disadvantaged and handicapped students in vocational programs is discussed.

Macleod, Kenneth. Adult High School Diploma Program Education Report. State Department of Educational and Cultural Services, Augusta, Maine, November, 1973.

From a sample of 3,000 graduates, 600 returned questionnaires assessing the success and quality of the Maine Adult Diploma Program. The responses describe dramatically how successful the programs have been in helping adults not only further their education but also in stimulating their growth toward responsible and productive Maine citizenship.

Macvicar, Phyllis. A Demonstration of the Interrelating of Library and Basic Education Services for Disadvantaged Adults. Final Report, West Virginia Model Center. Morehead State University, Kentucky, Appalachian Adult Education Center, June, 1973.

A report of a project coordinating public libraries and approximately 200 ABE participants in Cabell, Wayne and Putnam Counties, West Virginia, describes activities, analyzes data and explains the results of the coordination.

Macvicar, Phyllis. Library--ABE Projects. Case Studies. Morehead State University, Kentucky, Appalachian Adult Education Center, August, 1971.

Forty-one case studies submitted to the Appalachian Adult Education Center by the staffs of four projects demonstrating library services to disadvantaged adults, in cooperation with ABE programs.

Maine University. An Evaluation Study of Adult Basic Education in Maine. Orono, Maine, Division of Continuing Education, July, 1969.

This evaluation study found that 1968-69 ABE programs reached only 1,034 out of a potential ABE population of 88,539; recommendations are made to increase the enrollment and upgrade the program.

Maine University. University of Maine Adult Learning Center for the Model Neighborhood in Portland, Maine. Phase 1. Final Report. Portland, June, 1971.

Describes a learning center project and its goals to improve and expand the educational and employment opportunities for the Portland, Maine Model Cities area residents, aged 16 and over who have not reached the eighth grade education level. As a working model of intensive ABE programs in other urban communities, a cyclical design for adult learning was developed which permits the testing of innovative programs.

Mangano, Joseph A. (Ed.). Strategies for Adult Basic Education. Perspectives in Reading, 11. International Reading Association, Newark, December, 1969.

Strategies and materials for reading instruction in ABE, together with psychological and sociological characteristics of undereducated adults. Demonstration centers, curriculum materials programs and related efforts are described and program procedures and outcomes are tentatively assessed.

Manzo, A. V. and T. F. Benzel. "Recommendations for a College Program for Disadvantaged Adults," Adult Leadership, Vol. 20, No. 9, March 1972, pp. 311-12.

Based on a program at Syracuse University which focused on inner city high school graduates, this article recommends support programs such as weekly meetings with project students, pre-course preparation, various remedial courses, mini-courses and associate degrees.

Massachusetts Council for Public Schools, Inc. Teaching Adults to Read, Research and Demonstration in a Program of Volunteer Community Action. Boston, Massachusetts, 1969.

Boston's Project for Adult Literacy attempts to assess the use of volunteers in adult literacy education and to evaluate two different reading methods, both of which proved to have similar shortcomings. The Massachusetts Council System, however, permits greater flexibility for experimentation toward effective change.

Matthews Educational and Management Systems Consultants. 1969-1970 Program Evaluation of Adult Basic Education. Corvallis, Oregon, 1970.

An evaluative study of 2,000 Oregon ABE students during the 1969-70 school year. The mean average reading grade level score of 4.1 had increased to 5.7 in approximately 3-4 months. The cost to raise one student one grade level in reading was less than $80.

Maxwell, David K. and others. Curriculum Materials in Career Education for the Disadvantaged. Appendix D of a Final Report. Ohio State University, Columbus, Center for Vocational and Technical Education, January, 1973.

Examines the curricular needs of disadvantaged students, curriculum materials according to different reading and interest levels, and the contribution of curriculum materials toward career awareness, career exploration, and career preparation.

Maxwell, Martha J. Evaluation of College Reading and Study Skills Programs. Paper presented at the Conference of the International Reading Association, Anaheim, California, May, 1970.

Describes and discusses a number of evaluation techniques for college reading programs, including the need to determine a clear definition of objectives and criteria tasks consistent with such objectives, the use of standardized tests, academic achievement, grades and grade-point averages and the assessment of students' needs and attitudes.

McArthur, John H. Research Project Concerning Students from Minority Groups. Harvard University, Cambridge, Massachusetts, n.d.

Identifies modifications to make the Master of Business Administration program at Harvard more effective in providing services to minority students, documents the modifications undertaken, and analyzes their effectiveness in promoting the employment of minority graduates.

McColl, Diana Roberta Duncan. A Comparison of Academic Advancement in Reading as a Result of Individual and Group Instruction with Job Corps Women. Ed.D. thesis, Oregon University, Eugene, 1969.

Examines reading gains of Job Corps students receiving individual or small group instruction and compares differential effects of these gains on the social and personal adjustment of students. There were no significant differences in reading gains or in personal and social adjustment between the groups.

McDaniel, John W. NYC Summer/In School Goes to Community College. Evaluation Technology Corporation, Camarillo, California, February, 1973.

A description and evaluation of NYC Goes to Community College, a combined work-study program for economically disadvantaged youth cooperatively conducted by NYCs and community colleges. Including the 1972 summer, over 10,000 youth participated in 128 separate programs, earning wages for work on campus jobs and credits in college courses.

McGonnell, Peter C. Adult Basic Education as a Program for Social Change. September, 1970.

Adults from King's County, Prince Edward Island who participated in a basic training for skill development (BTSD) program received instruction for 25 hours each week over a 5-month period using traditional classroom lectures. While pre- and post-tests showed relatively small group gains in terms of grade level, the program was limited by use of primary teachers without special training for dealing with disadvantaged adults.

McGraw-Hill, Inc., New York, Information and Training Service Division; Office of Education (DHEW), Washington, D. C., Division of Vocational and Technical Education. Educationally Deficient Adults: Their Education and Training Needs. 1965.

This survey indicates that adult basic and vocational education (including job-oriented social training), united community efforts to recruit and encourage poorly motivated adults, close integration of literacy and job training, student grouping by ability, team teaching, instructor training and research and development were among the major areas of need.

McMillan, Eunice. A Demonstration of the Interrelating of Library and Basic Education Services for Disadvantaged Adults. Final Report, Richland County School District No. 1. Morehead State University, Kentucky, Appalachian Adult Education Center, June, 1973.

This Morehead State University, Kentucky--Richland County School District No. 1 project demonstrates how undereducated adults can become greater users of library facilities.

McMinnville Public School, District 40, Oregon. Mexican-American and Public Aid Recipients Project (MAPAR). Final Report. November, 1969.

An evaluation of MAPAR, a project designed specifically to explore and develop an educational program of effective methods for teaching the educationally disadvantaged adult in an individualized learning center, found that the original design proved to be fundamentally sound for the under-educated Anglo-American and the Anglicized Mexican-American who has adopted middle class values toward education, but was inefficient in meeting the needs of the Mexican-American migrant or ex-migrant with little or no language skills in English.

Meike, Charles and Herbert Hawthorne. Study of Adult Vocational Education Programs in Three Cities. Analytic Systems, Inc., Vienna, Virginia, September, 1971.

An assessment of the extent to which Adult Vocational Education programs are meeting the needs of the inner city resident, which also identifies several major problems of the programs.

Melendrez, Gilbert and others. A Proposed Model for PSDS Admissions. Technical Report No. 15. Claremont Center for Educational Opportunity, California, January, 1971.

The purpose of the Program of Special Directed Studies (PSDS) is to identify high school seniors and recent graduates, underachievers but with ability and potential, and to prepare them, by a two-year program of carefully planned and supervised studies, to move into a standard degree program at an appropriate level and successfully to complete it.

Melnick, Murray. Higher Education for the Disadvantaged: Summary. Abstracts and Reviews of Research in Higher Education. Hofstra University, Hempstead, New York, Center for the Study of Higher Education, April, 1971.

A review of research on the success of Upward Bound students and their performance in college, the extent of institutional involvement with disadvantaged students and suggestions for further research in relation to

remediation strategies, the role of the instructor and application of the definition "high-risk."

Mendelsohn, Harold and others. Operation Gap-Stop. A Study of the Application of Communications Techniques in Reaching the Unreachable Poor. Final Report. February, 1968.

This report describes a pioneering effort in the use of TV in bringing to the disadvantaged particular kinds of information. Eight 30-minute TV scripts, titled "Our Kind of World," were aired to sample audiences in five Denver housing authority units. Thirty-nine percent of the viewers indicated dispositions to change certain behaviors as a result of the special programs.

Mentec Corporation. Evaluation of the Relevance and Quality of Preparation for Employment Under the MDTA Institutional Training Program. Final Report. Los Angeles, California, May, 1971.

This evaluation, the result of surveys of administrative personnel, employers, counselors, and trainees, revealed that (1) completion rates are generally low; (2) relevance to labor market requirements could be improved; (3) the quality of training is high; (4) basic education components are providing valuable instruction in fundamental skills.

Michigan State Department of Education. Adult Basic Education. A Bibliography of Materials. Lansing, 1969

A comprehensive, annotated listing of curriculum materials, machines and equipment available to assist ABE students.

Miller, Paul A. "Manpower Development: The University's Contribution," in Manpower Development in Appalachia: An Approach to Unemployment, Frederick A. Zeller and Robert W. Miller (Eds.). New York: Frederick A. Praeger, 1968.

A university president reaches the conclusion that in terms of modern needs and challenges, the university can and should fill a leadership function in the process of adapting education and training programs to meet present and predicted problems of economic-manpower development.

Miller, W. Tom. Evaluation Report: Seattle Central Community College Basic Skills Education Program for Inmates of King County, City of Seattle Jails. Puget Consultants, Seattle, Washington, June, 1974.

This evaluation report of the adult education jail program in King County, Washington, describes the administration of the program by the Seattle Central Community College since the Spring of 1971, during which time a total of 1,552 inmates were enrolled in the program. Wide Range Achievement Test scores for 71 recidivists in the county jail showed average grade level score increases of 1.49 in reading and .85 in math.

Mobilization for Youth, Inc. Field Experiments in Manpower Issues. New York, 1971.

The data-based results of systematic experimentation and survey research found (1) that monetary incentives did not significantly enhance trainees' learning of English; (2) that trainees chose basic items over luxury as potential rewards for training; (3) that the ambiguity of drug addicts' work perceptions calls for more than ordinary manpower services in spite of their expressed vocational interests in keypunching and auto repair.

Moore, Allen B. Noncognitive Attributes of Participants and Nonparticipants in Selected Adult Basic Education Programs. Raleigh: North Carolina State University, Center for Occupational Education, 1970.

In ten selected communities in North Carolina, a total of 486 disadvantaged adults were pretested and 381 were posttested. Data for 343 (279 participants and 64 nonparticipants) were collected. Results showed (1) no significant differences in scores between participants and nonparticipants in adult basic education; (2) independent variables associated with dependent variables were participation, sex, reported monthly income and social participation scores; (3) the noncognitive measures were not effective in distinguishing participants.

Morehead State University. Life Coping Skills Categories and Sub-Categories. Areas of the Information Needs of Disadvantaged Adults. Appalachian Adult Education Center, June, 1973.

A list of the major categories and sub-categories of the information needs of disadvantaged adults, to be used to assess library collections of materials in life coping skills, to select materials for adults in coping skills areas and to develop materials to meet the information needs of disadvantaged adults.

Moss, J., Jr. "Vocational, Technical and Practical Arts Education," Review of Educational Research, Vol. 38, October, 1968, pp. 309-440.

Research in nine different phases of vocational education, including manpower supply and demand, organization and administration, program evaluation.

Mountain-Plains Education and Economic Program, Inc. The Residential Career Education Concept: The Mountain-Plains Program. An Overview. Glasgow Air Base, Montana, February, 1972.

This program represents an attempt to prepare adults and children of rural unemployed and underemployed families in Wyoming, Montana, Idaho, North Dakota, South Dakota and Nebraska for rewarding employment.

National Assessment of the New Careers Program, July 1967-October 1969. Final Report.

An in-house assessment of the New Careers Program, nationwide, covering 112 projects, with special emphasis on benefits and costs of training.

National Association for Public and Continuing Adult Education. Evaluation of Danbury ABE Program. June, 1971.

A case study of the Danbury, Connecticut Public Schools Adult Education Program and its close relationship with community agencies which saw ABE increasing from 97 to 770 enrollments between 1965 and 1971 and the general adult program increasing from 281 to 2,200 enrollments.

National Commission on Resources for Youth, Inc. Youth Tutoring Youth: It Worked. A Report of an In-School NYC Demonstration Project. New York, January, 1968.

An overview of a 1967 summer pilot program in which two hundred

14 and 15 year old under-achievers were trained to serve as tutors for disadvantaged elementary school children. "How It Worked in Newark" and "How It Worked in Philadelphia" are described in detail.

National Council of Teachers of English. Language Programs for the Disadvantaged. The Report of the NCTE Task Force on Teaching English to the Disadvantaged. NCTE, Champaign, Illinois, 1965.

A survey providing information on 190 independent and uncoordinated programs in language and reading for the disadvantaged, both urban and rural, throughout the U. S.

National Urban League. Project Assist: Final Report. Atlanta: Southern Regional Office, 1968.

Project Assist, an experimental and demonstration project implemented in six southern cities and their surrounding areas, focused on a target population of high school graduates and college dropouts in an attempt to break down barriers to equal employment opportunities and to assist participants in test taking so they could obtain both entry level and advanced jobs. The program was successful in getting 60 persons into entry level jobs and 47 upgraded; their average monthly income increased from $69 to $280.

Navajo Community College. Navajo Adult Basic Education (NABE). Chinle, Arizona, 1971.

Objectives of this special experimental demonstration project in ABE for the Navajo were (1) to raise the educational and social level; (2) to assist students to the advantage of occupational and vocational training programs; (3) to acquaint students with nearby service agencies; (4) to encourage students to better meet their responsibilities; (5) to promote the personal well-being and happiness of each student. NABE operates in fifteen communities, with a total enrollment of 350 who receive approximately 18 hours weekly of classroom instruction.

Nazzaro, Lois B. Annotated Bibliography. Free Library of Philadelphia, Pennsylvania, January, 1971.

The 610 references in this bibliography, a record of the instructional materials in the Reader Development Program of the Free Library of Philadelphia, are designed to aid under-educated adults in overcoming their educational, cultural and economic deficiencies.

Nesbitt, Charles. "Designing Relevant Programs for Urban Black Adults," Adult Leadership, Vol. 22, No. 7, January, 1974, pp. 249-52.

An established set of criteria for developing ABE programs for black adults in urban areas is needed. The reported study resulted in 12 recommended criteria which are delineated.

Nicely, Robert F., Jr. and Lawrence M. Knolle. "Simulation in Adult Education," Journal of Business Education, Vol. 49, No. 8, May, 1974, pp. 323-5.

Simulations were employed in a clerical skills training project for economically disadvantaged women in an attempt to relate the curriculum more directly to the student's needs.

Nightwine, W. H. Four Corners Regional Project for Vocational Education in Arizona. Final Report. Arizona State Department of Education, Phoenix, Division of Vocational Education, August, 1971.

Accomplishments of a project to help alleviate unemployment problems of the disadvantaged in Arizona's northern and central counties include the establishment of training programs in Mohave County, the funding of a proposal to field test a computer assisted instructional system and completion of performance objectives in basic education.

Northcutt, Norvell and others. Adult Functional Competency: A Summary. University of Texas at Austin, Extension Division, March, 1975.

Specifies the competencies which are functional to economic and educational success in today's society and develops devices for assessing those competencies by means of an Adult Performance Level (APL) concept. This concept encompasses competencies in reading, writing, speaking, listening, computation and problem solving in the areas of consumer economics, occupational knowledge, health, community resources and government and law.

Northcutt, Norvell W. and others. The Adult Performance Level Study. University of Texas at Austin, Division of Extension, 1973.

An effort to identify the learning needs of undereducated adults through research, including a survey of professionals in adult education and interviews with adult learners.

Oak Ridge Associated Universities and Union Carbide Corporation, Nuclear Division. Developing Technical Skills for Black Trainees in a Worker Training Program. U. S. Atomic Energy Commission, Training and Technology Project, Oak Ridge, Tennessee, October, 1970.

A study focusing on the 160 black trainees who graduated from this project in 1969. The typical graduate increased his income more than $5,000 per year; the six-month training program graduate also participated more actively in community affairs.

Office of Economic Opportunity, Job Corps. Job Corps Reading Manual. Washington, D. C., June, 1967.

A description of the three-step reading program designed to assess the current reading ability of a Job Corpsman, to introduce him to appropriate material for improving his reading ability and to raise this ability to the 7th or 8th grade level on standardized reading achievement instruments.

Office of Economic Opportunity. Upward Bound 1965-1969: A History and Synthesis of Data on the Program in the Office of Economic Opportunity. Washington, D. C.: Office of Planning, Research and Evaluation, March, 1970.

An overview of five years of Upward Bound, including (1) student characteristics and program achievement; (2) a list of research studies and a synthesis of research findings; (3) student characteristics and indicators of program success, such as college enrollment and retention; (4) an analysis and findings of field visits; (5) a cost-benefit analysis; (6) a discussion of the Upward Bound student in college.

Office of Education (DHEW), Bureau of Research. Adult Armchair Education Program. Final Report. June, 1967-March, 1968. Washington, D. C., 1968.

A report on the Adult Armchair Education (AAE) project of the Opportunities Industrialization Center (OIC) in Philadelphia which undertook instruction and skill development among the disadvantaged through learning groups in homes.

Ohliger, John and Lori Ohliger. Workshop in Adult Basic Education (Columbus, Ohio). Ohio State Department of Education, Columbus. Ohio State University, Columbus, Center for Adult Education, July, 1970.

This workshop was organized around the team approach in developing a model learning center, field experiences in the Columbus area, and speeches by special consultants on such topics as adult learning, psychological characteristics of ABE participants, reading instruction, teaching English as a second language, instructional materials, the role of the teacher, learning centers in the large city, reading and language, and evaluation.

Olmstead, Joseph A. Theory and State of the Art of Small-Group Methods of Instruction. Human Resources Research Organization, Alexandria, Virginia, March, 1970.

An evaluation of the more common small-group methods of instruction in terms of their effectiveness for teaching adults.

Oskamp, Stuart and others. Effects of a Compensatory College Education Program for the Disadvantaged: A Further Report. Claremont Graduate School, California, April, 1970.

A success rate of over 50% is claimed for a five-year project to provide four-year high quality college education for disadvantaged students through a program of special directed studies for transition to college. Attitudes, values and personality traits of program students were similar to those of more advantaged, typical Claremont students.

Pacific Training and Technical Assistance Corporation. The Impact of Urban WIN Programs. Final Report. Berkeley, California, May, 1972.

Focuses on the record and potential of Work Incentive (WIN) programs for improving the status of disadvantaged workers. Although WIN was found to have no significant impact on the number or quality of jobs attained by the disadvantaged, its efforts were found to be instrumental in raising educational levels and vocational skills.

Parker, Carol L. A Guide for Planning and Implementing Career Education Programs in the Community College. Washington State Board for Community College Education, Seattle, Research and Planning Office, June, 1974.

Provides criteria for the planning and implementing of career education programs at the community college level and suggests ways in which community colleges might better serve the needs of minority and disadvantaged students.

Pearl, Arthur and Sylvia Belton. The Bethel Project. Project Report 3, The NDEA National Institute for Advanced Study in Teaching Disadvantaged Youth. American Association of Colleges for Teacher Education, Washington, D. C., August, 1968.

Describes a demonstration program, instituting the New Careers model into the Bethel school system, Eugene, Oregon, to create an entry system for disadvantaged youth into teacher preparation academic course work, to acquire academic credit for the teacher aide's on-the-job training within the university structure and to negotiate a mobility system for the teacher aide within the school system.

Perry, Charles R., Bernard E. Anderson, Richard L. Rowan, Herbert R. Northrup, and others. The Impact of Government Manpower Programs. Industrial Research Unit, The Wharton School, University of Pennsylvania, 1975.

A comprehensive analysis of the impact--primarily economic--of government manpower programs and of what these programs accomplished and failed to accomplish. MDTA, JOBS, PSC, AOP, PEP, OIC, CEP, WIN, Job Corps, NYC, and Operation Mainstream are evaluated as a whole and separately.

Police Athletic League. The PAL-JOEY Project, Youth Profiles. New York, n.d.

A demonstration project, under MDTA auspices, helps youths, ages 16-25, by testing and guidance, basic education, skills instruction and on-the-job training with placement and follow-up.

Preising, Paul P. Increasing GPA and Student Retention of Low-Income Minority Community College Students through Application of Nightengale-Conant Change Packages--A Pilot Study. San Jose City College, 1973.

A study, conducted to determine whether the application of Nightengale-Conant attitude change packages to low-income minority community college students would increase their grade point averages and retention rates, found that both the GPA and retention rates of experimental students were higher than those of the control group.

Prial, Frank J. "A Degree Based on Skills, Not Credits," New York Times, Sunday, May 4, 1974, p. 17.

A description of the College for Human Service in New York City, organized to turn out a new kind of social service worker, the human services professional. Classroom instruction is combined with work in social service agencies, with the curriculum based on student performance and competency rather than on grades or course credits.

Programs for Disadvantaged Students in Graduate Schools. Council of Graduate Schools in the U. S., Washington, D. C., Educational Testing Service, Princeton, New Jersey, January, 1970.

Surveys procedures and programs established by 249 graduate schools for disadvantaged students. Major findings: (1) common methods of recruitment; (2) many schools waive or liberalize admission requirements; (3) many schools offer special remedial services; (4) many provide for partial or total tuition remission; (5) most procedures and programs were established in 1967 or later; (6) many report ten or fewer disadvantaged students enrolled; (7) most feel it is too early to evaluate effectiveness; others report student achievement has been excellent and the rate of attrition low.

Puerto Rican Forum, Inc. Project BOLT: Final Report for the Experimental and Demonstration Phase of the Basic Occupational Language Training Program. New York, New York, n.d.

Describes and evaluates a program to teach English language skills to Spanish-speaking people and Spanish language skills to English-speaking people. The curricula emphasize high-skilled instructors, audiovisual and audiolingual techniques, job-oriented vocabularies and on-site instruction.

Quinlan, Pierce A. Graduates of the Norfolk Project One Year Later. Manpower Evaluation Report No. 5. Washington, D. C.: U. S. Department of Labor, Manpower Administration, October, 1965.

A follow-up study of the Norfolk Project for retraining unskilled, unemployed workers through job training combined with basic education. One year after completion of training, 99% had found employment and most had experienced significant advances in average income.

Quirk, Cathleen and Carol Sheehan (Eds.). Research in Vocational and Technical Education. Proceedings of the Conference on Research in Vocational and Technical Education, University of Wisconsin, 1966.

Among the topics discussed at this conference, concentrating upon reports and critical discussion of recent research and experimentation, were vocational education and the disadvantaged; job clusters and general vocational skills; curriculum developments in vocational education programs.

Rehabilitation Research Foundation. Individualized Reading Instructional System (IRIS). Montgomery, Alabama, n.d.

The Individualized Reading Instructional System (IRIS) systematizes the use of commercially published reading instructional materials for self-pacing, individualized, or independent reading. It consists of six modularized instructional tracks, which place the student in an appropriate level where he can experience success and move into more challenging modules of instruction. The system is easy to establish, manage and maintain.

Research and Policy Committee of the Committee for Economic Development. Education for the Urban Disadvantaged: From Preschool to Employment. New York, 1971.

A comprehensive review of the current state of education for disadvantaged minorities; sets forth philosophic and operational principles which are imperative if the mission of the urban schools is to be accomplished successfully.

Rice, Oliver. "Some Observations on the Women's Job Corps," Audiovisual Instruction, Vol. 13, February, 1968, pp. 130-37.

The accomplishments of the Clinton, Iowa Job Corps Center for women, operated by the General Learning Corporation under contract with OEO.

Riessman, Frank and Hermine I. Popper. Up From Poverty: New Career Ladders for Nonprofessionals. New York: Harper and Row, Inc., 1968.

Twenty-three essays discuss the movement to provide careers for poor non-professionals as an economic and social reform, describe new

careers occupations in social welfare, education, the health services, corrections and industry, and offer guidelines for designing new careers occupations and for training non-professionals.

Riessman, Frank and others. Essays on New Careers: Social Implications for Adult Educators. Syracuse University, New York, Publications Program in Continuing Education, July, 1970.

These essays concentrate on the challenge that adult education faces in helping the urban poor develop meaningful paraprofessional careers in the human services.

Roach, Margaret Estes. Effect of an Instructional Program Upon Complex Cognitive Behavior of Food Service Workers. Master's thesis, Washington State University, College of Home Economics, 1968.

A study dealing with the effect of instructing food service workers on a program in sanitation through the use of a teaching machine. It was found that knowledge was increased when the subjects completed the program and that this knowledge was carried over into a work situation.

Robinson, Byrl Elmer. Use of the Initial Teaching Alphabet in English as a Second Language in Classes for Spanish Speaking Adults. Ed.D. thesis, UCLA School of Education, 1969.

Compares traditional orthography (T.O) and initial teaching alphabet (I.T.A.) instruction in five randomly selected adult English-as-a-second language classes in Los Angeles Unified School District. The use of I.T.A. symbols in such classes for teaching selected vowels was strongly supported by the analysis.

Rochester Jobs, Inc. Operation Young Adults. Rochester, New York, August, 1971.

Describes a combined work-study program for potential and actual high school dropouts, designed (1) to demonstrate the relationship between education and the world of work; (2) to test the feasibility of a joint educational approach utilizing trade instructors and academic teachers; (3) to develop a work related curriculum; (4) to develop a process for transferring earnings into the regular school system.

Rosen, Pamela (Ed.). Tests for Educationally Disadvantaged Adults. Educational Testing Service, Princeton, New Jersey, July, 1973.

Sixty-five instruments, published between 1925 and 1972, are described for use with adults who have received only an elementary education or for those whose education was impaired. Both achievement and aptitude measures are included.

Rosen, Pamela. Tests of Basic Learning for Adults: An Annotated Bibliography. ERIC Clearinghouse on Tests, Measurements and Evaluation, Princeton, New Jersey, November, 1971.

Brief annotations of currently available basic learning tests, either specifically designed for adults or modified for use with adults.

Rowan, Richard L. and Herbert R. Northrup. Educating the Employed Disadvantaged for Upgrading. A Report on Remedial Education Programs in the Paper Industry. Pennsylvania University, Wharton School of Finance and Commerce, 1972.

A study evaluating the impact of ABE programs on the upward mobility

of disadvantaged workers in the paper industry, in which the relation of training to promotion was neither brought out carefully beforehand nor demonstrated after the programs were in effect. Those who completed the courses showed little improvement in arithmetic and virtually none in reading, and there was no relationship between the taking of courses, improvement in test scores, and job advancement.

Rutgers University and the New Jersey Department of Labor and Industry. Educational Advancement and Manpower Development for Wage Earners. New Brunswick and Trenton, New Jersey, n.d.

A report describing a project which explored ways of advising and encouraging wage earners to use community resources for education and training, with a special emphasis on advancement into better jobs.

Sarthory, Joseph A. NYC Summer Pilot Project. Preliminary, Interim and Final Reports. Kansas State University, 1971.

A description of an NYC project enrolling 81 disadvantaged high school students in a program of summer employment, educational and social enrichment and familiarization with the world of work.

Scanland, Francis Worth. An Investigation of the Relative Effectiveness of Two Methods of Instruction, Including Computer-Assisted Instruction, as Techniques for Changing the Parental Attitudes of Negro Adults. Florida State University, Tallahassee, Computer-Assisted Instruction Center, July, 1970.

Pre-post tests designed to measure attitudes toward education showed that the attitudes of Negro parents in the South were changed significantly and positively by computer-assisted instruction but were not changed significantly by lecture/discussion instruction, a finding which may have application in adult education.

Scharles, Henry Godfrey, Jr. The Relationship of Selected Personality Needs to Participants, Drop-Out and Achievement Among Adult Learners. Doctoral dissertation, Florida State University, Tallahassee, August, 1966.

A dissertation which supports the thesis that personality needs are related to the adult's decision to participate in learning activities as well as to the extent of involvement and the degree of achievement attained. These facts might suggest direction in the selection of methods and techniques for a given learning situation.

Schechter, Kristina. Evaluation of Project Step-Up, Vol. II. Final Report. Pacific Training and Technical Assistance Corporation, Berkeley, Calif., June, 1972.

A study to assess the effectiveness of an adult education program to demonstrate the relationship between enhanced educational skills and promotions and salary increases for entry-level employees.

Seaman, Don F. and Emmett T. Kohler. Adult Basic Education in Mississippi. An Evaluation. Two Volumes, June, 1969.

This large-scale evaluation notes that in 1968-69, the ABE program enrollment was 22,000, although the target population was 440,000, with the first priority assigned to adults functioning at fifth grade level or below. The severest deterrent to effective evaluation has been the

failure to specify operational objectives; the most serious problems are lack of adult education courses available in the State, lack of modern teaching methods and equipment, need for more teacher training, lack of State funds to match federal funds, and geographical areas within the State which are in non-compliance with the Civil Rights Act.

Seay, Donna M. The Roles of the Teacher for the Effective Use of Programmed Instruction in a Correctional Setting. Draper Correctional Center, Elmore, Alabama. Paper presented at Annual Correctional Education Association Conference, Chicago, Illinois, November, 1966.

Delineates the many roles of the teacher in a correctional setting and describes the PerceptoScope reading materials, by means of which all students in a special reading program at Draper showed a total composite average increase of 2.5 grade levels after 40 hours of instruction.

Secretary of Department of Health, Education and Welfare. Education and Training: A Chance to Advance. Seventh annual report to the Congress on Training Activities under MDTA. Washington, D. C.: U. S. Government Printing Office, 1969.

Partial contents: manpower training skills centers; national programs and services; innovations, experiments and special programs; evaluation.

Secretary of Department of Health, Education and Welfare. Education and Training: Doorway to the Seventies. Eighth annual report to the Congress on Training Activities under MDTA. Washington, D. C.: U. S. Government Printing Office, 1970.

Partial contents: training in classroom shop and skills centers; staff development; curriculum materials and training equipment; evaluation of institutional training.

Secretary of Department of Health, Education and Welfare. Education and Training: Learning for Jobs. Report to the Congress on Training Activities under MDTA. Washington, D. C.: U. S. Government Printing Office, 1968.

Partial contents: adapting to economic change; the range of training; national programs and services; innovations and experiments; evaluating training.

Secretary of Department of Health, Education and Welfare. Education and Training: Opportunity through Learning. Ninth annual report to the Congress on Institutional Training under MDTA. Washington, D. C.: U. S. Government Printing Office, 1971.

Contents: preparing people for progress; program development and innovations; evaluating institutional training; measuring increases in earnings due to MDTA program participation.

Sexton, Patricia Cayo. Operation Retrieval: The Basic Education Component of Experimental and Demonstration Projects for Disadvantaged Youth. New York University, New York, n.d.

Analyzes education E & D projects teaching reading, writing and computational skills. Data used included reports submitted to the Department of Labor by E & D projects, on-site visits to eight projects

and a review of the reported progress and experience of non-E & D projects.

Shealy, Floyd Milton. A Study of Job Corpsmen at Camp Atterbury, Indiana, April, 1965-May, 1966: Measures of Intelligence, Achievement and Aptitude. Doctoral dissertation, Indiana University, 1967.

A study to determine what significant changes occurred in the Camp Atterbury Job Corpsmen over a six-month period on the basis of test-retest measures of intelligence and reading and arithmetic achievement. The Corpsmen made significant gains in IQ and reading and arithmetic grade equivalents; Northern Corpsmen scored higher than Southern Corpsmen on most measures; few differences were noted between urban and rural corpsmen; young corpsmen generally scored higher than older corpsmen on most measures.

Sherron, Ronald H. An Evaluation of the Adult Basic Education Program in Virginia 1970-71. Virginia Commonwealth University, School of Education, Richmond, Virginia, 1971.

An evaluation, with recommendations, of the Virginia ABE effort. A sample of 1,625 students gained approximately one grade level in mathematics and two-thirds of one grade level in reading for each 150 hours of attendance in the ABE program.

Silverman, Dave. "Rutgers' Remedy," College Management, Vol. 5, No. 4, April, 1970, pp. 27-29.

A description and assessment of two programs for disadvantaged students developed at Rutgers University: the Transitional Year Program, a year of remedial courses, and the Urban University Development Program which pays for an entire four-year course for students in cities where Rutgers campuses are located. In terms of scholastic performance, partly because of the tutoring program, the disadvantaged students do outstandingly well.

Silverman, Leslie J. Follow-up Study of Project Uplift, the MDTA E & D Project Conducted by Florida A & M University. Bureau of Social Science Research, Inc., Washington, D. C., July, 1967.

A follow-up study of a project designed to find effective ways of reaching, recruiting, training and placing disadvantaged rural adults in a ten-county section of Northern Florida. Findings: (1) the project design was inappropriate for the area needs; (2) use of consultants in place of full-time staff specialists in training and counseling diminished program effectiveness; (3) mass recruitment efforts were effective; (4) job development efforts were insufficient.

Skill Achievement Institute. Upgrading the Underemployed in the Work Environment: Vol. 1 through 4 and Summary of the 4-Volume Report. Final Report. Lake Success, New York, July, 1969.

A final report of an 18-month E & D project in Newark, Baltimore, and Cleveland designed to develop ways to meet in-plant skill needs by upgrading the job skills of entry level, mostly minority group workers through High Intensity Training (HIT) and by improving capacity for better employee-supervisor relationships.

Skill Upgrading in Cleveland, Ohio. SUIC: Improving Opportunities through In-Plant Training. March, 1970

A summary of High Intensity Training (HIT) activities aimed at upgrading low-skill, low-wage workers within a plant setting and with small jumps in job classifications and pay increase guarantees. Of the 282 workers trained, about 86% succeeded in moving to an upgraded job with average pay increases of 8.44%.

Skill Upgrading, Incorporated. Final Report. Baltimore, Maryland, March, 1970.

A project set up in Baltimore to provide technical assistance in designing ways to meet in-plant skills needs by upgrading job skills on entry workers through High Intensity Training (HIT). A follow-up study of 99 of the 214 workers who completed the programs showed that 77% received jobs for which they were trained at an average salary increase of 21 cents an hour.

Somers, Gerald G. Evaluation of Work Experience and Training of Older Workers. Industrial Relations Research Institute, University of Wisconsin, 1967.

An analysis of the data required to construct a benefit-cost model of older worker participation in the Work Experience Program.

Somers, Gerald G. and Ernst W. Stromsdorfer. A Cost-Effectiveness Study of the In-School and Summer Neighborhood Youth Corps. University of Wisconsin, Madison, Industrial Relations Research Institute, Center for Studies in Vocational and Technical Education, 1970.

A study, prepared for the Manpower Administration, U. S. Department of Labor, of a nation-wide sample of NYC participants from projects in operation between 1965 and 1967.

Somers, Gerald G., Graeme McKechnie and others. The Training and Placement of Older Workers: An Evaluation of Four Community Projects. University of Wisconsin, Center for Studies in Technical and Vocational Education, September, 1967.

This description of four experimental community projects in Baltimore, Boston, Buncombe County, North Carolina and Milwaukee deals with the special measures required for effective job placement among older workers. While only limited direct economic benefits were reported, some approaches and techniques were found to be more successful than others.

Somers, Gerald G. and others. The Effectiveness of Vocational and Technical Programs: A National Follow-Up Survey. University of Wisconsin, Madison, Center for Studies in Vocational and Technical Education, 1971.

A national sample of vocational students who graduated from high school, post-secondary schools and junior college vocational programs in 1966 was surveyed three years later to determine the effectiveness of their vocational education.

Stanley, Miles C. "Training and Education as Solutions for Manpower Problems: A Labor Viewpoint," in Manpower Development in Appalachia: An Approach to Unemployment, Frederick A. Zeller and Robert W. Miller (Eds.). New York: Frederick A. Praeger, 1968.

The President of the West Virginia Labor Federation, AFL-CIO, criti-

cizes the inability or unwillingness of the schools to adapt to the needs of disadvantaged youth and adults and calls for a re-examination of present approaches to all levels of education in Appalachia.

Stanley, Miles C. and others. "The Role of Formal Education and Training in Manpower Development," in Manpower Development in Appalachia, Frederick A. Zeller and Robert W. Miller (Eds.). New York: Praeger, 1968, pp. 101-151.

An examination of the present and potential relevance of formal education and training, with an emphasis on the inability or unwillingness of educational institutions to adapt to the needs of the disadvantaged.

Steuart, R. Calvert. An Evaluation of the Educational Effectiveness of Selected Basic Education Literacy Materials. Unpublished doctoral dissertation, University of Wisconsin, 1968.

This research found that both the Sullivan Programmed Reading for Adults (linguistic approach) and Mott's Basic Language Skills (analytic phonics approach) methods were equally effective in teaching English as a second language. Greater gains were made by those whose initial competence in English was greater.

Stevenson, Diantha. Follow-Up Study of MDTA E & D Projects Conducted by Morgan State College. May, 1967.

Two projects, carried out in the nine-county eastern shore area of Maryland and serving the disadvantaged, attempted to (1) provide vocational training and guidance and (2) develop on-the-job training openings and ease job entry requirements. Follow-up data indicated that the results of both projects were disappointing.

Stewart, J. S. Retraining Older Employees for Upgraded Jobs. 1969.

In pilot projects in Newark and Philadelphia, the Penn Central Company used ABE along with on-the-job training to prepare 51 low-skilled, middle age blue collar workers (mostly minority employees of long standing) for clerical jobs in a computerized system. All of the trainees were successfully placed within the company.

Sticht, Thomas G., John S. Caylor, Richard P. Kern and Lynn C. Fox. Project Realistic: Determination of Adult Functional Literacy Skill Levels. Human Resources Research Organization, Alexandria, Virginia, Sept., 1972.

A description of data covering reading difficulty levels showing positive, significant correlations between literacy variables and certain indices of job proficiency.

Swan, L. M. and Jim DeVries. An Evaluation of the Great Lakes Apprenticeship Center (GLAC): Some Insights into Educational Programming for Disadvantaged Adults. Research Report. Wisconsin University, Madison, College of Agricultural and Life Studies, August, 1973.

An assessment of GLAC on the basis of the evaluation of former students, young adult disadvantaged American Indians, and on the basis of job improvement after training. The trainee evaluations were generally positive and substantial improvements were made in the trainees' pay levels and hours worked after training.

Swanson, Steven M., Irwin L. Herrnstadt and Morris A. Horowitz. The Role of Related Instruction in Apprenticeship Training: A Pilot Study. Northeastern University, Department of Economics, Boston, Massachusetts, December, 1973.

Provides an analysis of the role related instruction plays in training journeymen in three Boston area trades: machinist, electrician and operating engineer. It was concluded that the effect of related instruction on the performance of apprentices and journeymen differed in each trade and that only in the electrical trade did related instruction seem to offer a significant explanation of the variation in individual performance.

System Development Corporation. Evaluation of Adult Basic Education for the U. S. Office of Education. Initial Enrollee Interview. Form E 1. Falls Church, Virginia, November, 1973.

A 33-item interview designed to survey the effectiveness of ABE programs, covering class attendance, initial exposure to the program, reasons for enrolling, recent employment and salary history, program changes considered desirable, educational background and other demographic variables.

Texas University. An Annotated Bibliography of Adult Basic Education and Related Library Materials. Austin, Texas, September, 1972.

This annotated bibliography, designed to be an easy guide to suitable materials for adult educators and librarians for use by students in adult basic education, groups entries under fiction and nonfiction titles and reading levels.

Thomas, Hollie B. and others. Evaluation of an Educational Program for the Rural Disadvantaged. Research Report. July, 1970.

Evaluates the Rural Education Disadvantaged Youth Project (REDY), focusing on (1) youth and career choices, (2) family financial management, and (3) improvement of family income.

Tillmon, William R. A Special Project to Coordinate the Adult Basic Education Components of Four Federally Funded Agencies in the Kansas City Metropolitan Area as a Means of Reaching the Hard Core Functionally Illiterate and Providing a More Effective and Economical Academic Program. Kansas City, Missouri School District, Department of Extended Services, 1968-1969.

This is a report of a project to coordinate the adult basic education components of four agencies: the Work Incentive Program, the Concentrated Employment Program, Manpower Development and Training and the Kansas City, Missouri School District. Taken as a group, the Special Project adult learners completed a level of adult basic education in less than 180 hours on the average; students in the Reading Lab moved twice as fast. Of 723 enrollees, 76 earned 8th grade equivalency and 62 earned level promotions.

Tillmon, William R. A Special Project to Coordinate the Adult Basic Education Components of Four Federally Funded Agencies in the Kansas City Metropolitan Area as a Means of Reaching the Hard Core Functionally Illiterate and Providing a More Effective and Economical Academic Program. Kansas City, Missouri School District, Department of Extended Services, 1969-1970.

This is a report of a project to coordinate the adult basic education components of four agencies: the Work Incentive Program, the Concentrated

Employment Program, Manpower Development and Training and the Kansas City, Missouri School District. The small numbers of students in each IQ group made it impossible to determine the number of hours required to move one grade level, but those students who received vocational education or on-the-job training concurrently with ABE moved faster than those who did not.

Troogoff, Benjamin M. Employment Experience After MDTA Training: A Study of the Relationship Between Selected Trainee Characteristics and Post-Training Experience. Doctoral dissertation, Georgia State College, School of Business Administration, July, 1968.

A study, utilizing mailed questionnaires, to ascertain MDTA training effectiveness and to seek a relationship between certain trainee characteristics and employment success. It was determined that graduates of the program were employed a larger percentage of the time and with higher earnings than were dropouts, and that greater degrees of responsibility were also related to employment success.

Trowbridge House, Inc. Trowbridge House Geriatric Aide Program. Final Report. Hudson, Ohio, October, 1971.

The Trowbridge House geriatric aide program, carried out at MDTA centers in Akron and Cleveland with an 82% completion and a 98% placement rate, demonstrated that positive and active recruiting methods could be adopted to obtain more and better qualified disadvantaged persons for skill training and that a high quality, pre-vocational independent study program on tape cassettes, combined with traditional classroom and lab training, could produce more highly skilled trainees.

Turim, Jay, W. T. Towles, T. Lim and H. R. Woltman. Evaluation of the PSC Program. Final Report. Vol. I, Findings and Conclusions. Resource Management Corporation, Bethesda, Maryland, March, 1972.

A comprehensive assessment of the Public Service Careers Program, indicating that the short-run economic impacts were favorable from both the career and income perspectives, that on-the-job performance of enrollees was above average, and that training and education were the most valuable services offered to enrollees.

Ulmer, Curtis. Teaching the Disadvantaged Adult. National Association for Public School Adult Education, Washington, D. C., 1969.

A set of instructional guidelines for ABE stresses understanding of the characteristics and problems of disadvantaged adults; selection of instructional materials and equipment; effective classroom techniques; and an adult-centered approach to testing and counseling.

U. S. Bureau of Adult, Vocational and Technical Education. Prevocational Exploratory Programs in Manpower Development and Training. Washington, D. C.: U. S. Government Printing Office, 1970.

A study of the "prevocational exploratory program" designed to help the trainee whose education and experience are inadequate to prepare him either to make a vocational choice or to profit from job training, including chapters on launching prevocational programs and implementation of the initial moves.

U. S. Department of Labor, Manpower Administration. Breakthrough for Disadvantaged Youth. Washington, D. C.: U. S. Government Printing Office, 1969.

Analytical reports of 55 early projects (1963-66) developed under MDTA, including discussions of successes and shortcomings.

University City Science Center. A Guide to the Operation of a Basic and Clerical Skills Program for AFDC Trainees. Philadelphia, Pennsylvania, May, 1971.

Describes organization and procedure of a 1968-1970 training program demonstration project to give vocational and academic training to the educationally disadvantaged.

University of South Florida. Learning Center: Final Report, September, 1966-June, 1968.

A program for the unemployed and under-employed high school graduates in Hillsborough County, Florida, included personal services, individualized study programs, instruction in communication skills, commercial and applied mathematics, intensive small-group instruction, programmed materials and teaching machines. Of the 370 participants placed by the Center, 218 were employed full-time, 75 part-time; 27 entered colleges or universities, and 50 were placed in more appropriate training programs.

Urban Systems Research and Engineering, Inc. The Impact of Five Rural Concentrated Employment Programs. Cambridge, Massachusetts, March, 1971.

Delineates and analyzes the impact of the rural CEPs operating in Arkansas, Maine, Minnesota, New Mexico and Tennessee, which have enrolled over 40,000 participants. The report analyzes the characteristics of the participants and the strategy, structure and impact of the programs and recommends modification of the rural CEP model.

Ury, Claude M. "Recent Developments in Vocational Education," Catholic School Journal, Vol. 69, September, 1969, pp. 51-53.

Brief summaries of successful experimental programs in vocational education, particularly work-study projects.

Utah State Board of Education. Utah Adult Education Services. Adult Education Report, 1968-69. Salt Lake City, May, 1970.

Attempts to provide the public with a description of achievements, trends, needs and a cost accounting of adult education by program, school district and year.

Valencia, Atilano A. Identification and Assessment of Ongoing Educational and Community Programs for Spanish Speaking People. A report submitted to the Southwest Council of La Raza, Phoenix, Arizona, Southwestern Cooperative Educational Lab., Albuquerque, New Mexico, March, 1969.

Synoptic reports on 16 selected educational and community programs for Spanish speaking people, including a brief description of the project, an assessment of the program, and recommendations for dissemination and implementation of the project model.

Valencia, Atilano A. and James L. Olivero. Innovative and Dynamic Instructional Approaches in Adult Basic Education. March, 1969.

This report focuses on 7 areas: individualized instruction based on performance curriculum; team teaching as an interacting system; micro-teaching; humanistic goals of ABE; culture and poverty; the nature of the adult learner; social awareness and its implications for guidance.

Vargas, Ernest A. and Helen Wotkiewicz. An Evaluation of the McDowell County Community Action Agency. Adult Education Program. West Virginia University, Morgantown, December, 1968.

Evaluation of ABE-GED programs at eight West Virginia Centers. Also presents program shortcomings and recommendations for the future.

Varnado, Jewel G. The Relationship Between Achievement of Adult Students and Various Structural Classroom Situations. Ph.D. thesis, Florida State University, Tallahassee, 1968.

An investigation of the relative effectiveness of selected methods and materials in adult basic education classes. Participants were Negroes, largely women, covering a wide age span. Teacher dominated, restricted procedures, and pupil initiated, class cooperative procedures were compared. One hour classes were held five nights a week for eight weeks near the students' homes. There was a significant gain within classes in which the new instructional materials were used, regardless of the instructional method.

Vermont State Employment Service, Department of Employment Security. Study of the Vermont Manpower Experimental and Demonstration Program. Final Report. Montpelier, October, 1973.

An analysis of an experimental and demonstration project to provide work experience to unemployed, low-income clients to improve their employability so they can be moved into permanent, unsubsidized employment. Completers of the project had far fewer characteristics associated with the hard-core unemployed, had better mental orientation and attitudes, had greater satisfaction with their jobs and were judged as having made greater improvement in skills.

Vocational Guidance Service. A Work-Study Program for Socio-Economically Deprived Delinquent Youth, October, 1968.

A report of a one-year experimental and demonstration project which explored the feasibility of helping socio-economically deprived delinquent youth prepare for work or return to school. Three hundred three youth, ages 15 to 21 and 75% male, were placed on job sites related to their interests and were offered counseling and basic education; 70% made a positive adjustment by the close of the project in May, 1968.

Volland, Virgil A. and Curtis Trent (Eds.). Recruiting Students for Adult Education Programs. Kansas State University, Manhattan, May, 1969.

Papers, presented at an adult education seminar held at Kansas State University in Spring, 1969, deal with (1) student recruitment; (2) adult dropouts; (3) teaching techniques; (4) adult learning characteristics; (5) disadvantaged adults; (6) vocational programs; (7) adult counseling; (8) testing in ABE programs; (9) in-service teacher education; (10) mathematics materials; (11) the community college role; (12) administration of adult education programs.

Walker, R. W. A Prevocational Laboratory Centered Curriculum for Rural Disadvantaged Youth, Final Report. Urbana, Illinois, University of Illinois, College of Education, Agricultural Education Division, Vocational and Technical Education Department, July, 1970.

Describes and discusses a special program designed to serve rural disadvantaged high school boys by giving them a new kind of school curriculum. The "new opportunities" program was successful in several demonstrable

ways; an Instructional Guide developed might enable other school systems to set up the same kind of program.

Walther, R. H., M. L. Magnusson and S. E. Cherkasky. A Study of the Effectiveness of Selected Out-of-School Neighborhood Youth Corps Programs. U. S. Department of Labor, Contract No. 41-7-004-09. Washington, D. C.: George Washington University, Social Research Group, April, 1971.

A summary of the findings of a five-year (1966-1971) study of selected out-of-school NYC programs and the extent to which they enhanced the employability of enrollees. The primary hypothesis was not confirmed: the NYC did not prove to have helped enrollees achieve satisfactory adjustment to life and the world of work. However, some program components were having a significant effect.

Walton, Barbara J. Third Annual Report and Evaluation of the Talent Corps/College for Human Services. 1969 Program. College for Human Services, New York, 1970.

A delineation of the major 1969 achievements of the Talent Corps/College for Human Services, chartered to train disadvantaged men and women of New York City for jobs as new professionals in community agencies.

Weiss, Samuel. "SEEK Program Striving to Ride Out Its Troubles," New York Times, Sunday, May 4, 1975, p. 21.

SEEK--Search for Education, Elevation and Knowledge--represents an effort to open the doors of the City Universities of New York City to the economically and educationally disadvantaged. Remedial classes, intensive counseling and tutoring services and stipends have resulted in students achieving greater economic potential.

Weissman, Harold H. (Ed.). Employment and Educational Services in the Mobilization for Youth Experience. New York: Association Press, 1969.

A collection of papers describing the programs offered by the Mobilization for Youth Project, which seeks to help combat juvenile delinquency and unemployment of low-income youth by providing them with the skills needed for employment and increasing employment opportunities for them through training.

Willmart Services, Inc. Upgrading the Household Worker. Final Report (January, 1967-September, 1968), Washington, D. C., June, 1969.

One hundred eight women from low-income families were selected for a nine-week training course to upgrade the economic and social status of the household worker by combining attitudinal training with household skills training. Graduates, who were assigned to homes by the program sponsoring agency, received a wage that was higher than the going wage in the area and fringe benefits as well.

Wingo, Walter. "Six Ways to Put People to Work," Nation's Business, Vol. 56, No. 8, August, 1968, pp. 42-49.

Six case histories of how programs developed by private industry are making productive people of the "unhireables" while testing a variety of approaches to come up with the best methods. The six programs were sponsored and conducted by the (1) Continental Can Company in Harlem;

(2) the Northern Natural Gas Company in Houston, Texas; (3) the Olivetti Underwood Corporation in Paterson, New Jersey; (4) the Employment Enterprises Development Corporation in Ypsilanti, Michigan; (5) the Lawran Foundry Company in West Milwaukee, Wisconsin; and (6) the Olin Mathieson Chemical Corporation in Saltville, Virginia. All of these programs had basic education components.

Winter, Evelyn. Glassboro State College Head Start and Follow Through Supplementary Training Program. Glassboro State College, New Jersey, 1971.

A description of a program designed to (1) modify college admission requirements to include the poor, employed, experience-oriented program population as regular matriculating students; (2) examine and revise courses to make them relevant to the students' work experience; (3) reverse the usual sequence of courses to allow students to move from the practical to the theoretical; (4) develop new and innovative teaching techniques and materials derived from the students' needs; (5) revise the program operation on the basis of regular evaluation of the students.

Witt, Leonard R. Final Report on Project Develop. New York State Division of Parole, 1968.

A study of 115 males under parole supervision in the New York City area enrolled in Project Develop, a special treatment program emphasizing career development techniques such as psychological testing, educational-vocational and supportive counseling, training and selective job placement services. Findings indicated 37% less delinquency for those trainees who completed formal trade training compared to the group that failed or dropped out of training.

Wolfson, H. E. "Vocational Education in the Urban Setting," American Vocational Journal, Vol. 44, April, 1969, pp. 52-53.

Discusses the reasons occupational education should be combined with academic subjects to help the inner-city youth achieve self-identity and establish a relationship with the world outside of his ghetto surroundings.

Yarosz, Edward J. Evaluation Report: The City University of New York College Adapter Program. National Committee on the Employment of Youth, New York, August, 1971.

This independent evaluation of the College Adapter Program, an E & D project conducted by the City University of New York, provided NYC out-of-school enrollees and selected manpower trainees with a special program of enrichment services (both instructional/tutorial and counseling) as a means of qualifying them for college entrance. Of a total of 534 referrals, 431 (almost 80%) graduated or were currently enrolled in CUNY-CAP; 222 (about 87%) matriculated in college, of whom 195 (about 88%) remained enrolled. Of 198 who took the GED examination, 190 (about 92%) passed on the first administration, and the other 8% on their second try.

YMCA of Metropolitan Chicago, Illinois, Career Options Research and Development (CORD). Social Service Aide Project. Summary Reports and Proposals. September, 1970.

This report summarizes the Social Service Aide Project for the training and education of paraprofessionals, part of the Career Options Research and Development (CORD) project of the YMCA of Chicago.

Zwerling, S. The "Disadvantaged": Unemployable or Just Unemployed? A Report on Training for University Employment. Berkeley: California University, Space Sciences Laboratory, September, 1968.

Working through the Space Science Laboratory of the University of California at Berkeley, the New Careers Development in Oakland engaged in training unemployed, disadvantaged Negroes for new careers. The three-year training programs were designed to help develop entry level employment opportunities and to provide maximum prospects for continued employment and advancement by a combination of education, training, counseling and supportive services. Thus far, the educational performance had been encouraging and on-the-job performance had been officially judged satisfactory.

APPENDIX B

Greg Hodes, Educational Consultant
Teaching Assistance Organization, Inc.

APPENDIX B

Perhaps the most important conclusion to be drawn from the abstracts presented in this survey is that full, detailed and unambiguous reporting is the exception rather than the rule. Only about 25 or 30 of the 200 + abstracts provided all of the following information: subject(s) taught, pre- post-test gains, hours of instruction and number of students. However, what data were available were compiled to produce a very rough first approximation of "grade-levels-gained-per-unit-of-time-by-disadvantaged-adults." The data is slim and unclear and results are difficult to interpret; obviously, they must be considered tentative. Investigators with the requisite time are urged to improve upon these very speculative estimates by consulting the original documents and by contacting the original researchers for additional data and further clarification.

Only eleven reports provided grade gains for reading, math and english, combined (Some of these summarized data from numerous programs). Simple averages are set out below.

GAINS IN READING, MATH AND ENGLISH COMBINED
(Gains are reported in grade levels)

N = 11 Reports, 9112 subjects
Mean Gain: 1.07 (range .2 - 1.8) Median Gain: 1.2
Average Hours of Instruction: 257 (range 69 - 500)
Range of Number of Students Per Program: 11 - 7,976

Programs With 159 Hours of Instruction Or Less

N = 5 Reports, 8,504 subjects
Mean Gain: .95 Median Gain: 1.05
Average Hours of Instruction: 159 (range 69 - 200)

Programs With 250 Hours of Instruction Or More

N = 6 Reports, 608 subjects
Mean Gain: 1.17 Median Gain: 1.3
Average Hours of Instruction: 341 (range 250 - 500)

About twice as many studies were available which reported reading and math gains only. In addition to computing grade gains for the entire group and for the upper and lower halves of instructional hours, a procedure was used for weighting for number of students. (This was done by multiplying the number of students in each program by the grade gain per program and dividing the sum of these for all programs by the total number of students). Actually, the result of this approach did not differ substantially from the grade level gains for the unweighted averages, though the average class hours were altered substantially.

GAINS IN READING AND MATH ONLY $\frac{(R + M)}{(2)}$

Average unweighted Grade Gains:

N = 22 Reports, 4,372 subjects
Mean Gain: 1.13 (range - .2 - 2.25) Median Gain: 1.14
Average Hours of Instruction: 194* (range 36 - 500)
Range of Number of Students Per Report: 11 - 1,448

Programs With 150 Hours of Instruction or Less

N = 11 Reports, 3,199 subjects
Mean Gain: 1.43 Median Gain: 1.3
Average Hours of Instruction: 97* (range 36 - 150)

Programs With 180 Hours of Instruction or More

N = 11 Reports, 1,173 subjects
Mean Gain: .84 Median Gain: .88
Average Hours of Instruction: 291* (range 180 - 500)

Average Grade Gains Weighted for # of Students:

N = 22 Reports, 4,372 subjects
Mean Gain: 1.02 (range - .2 - 2.25) Median Gain: 1.0
Range of Number of Students Per Program: 11 - 1,448
Average Hours of Instruction: 122* (range 36 - 500)

Programs with 150 Hours of Instruction or Less Weighted For # of Students

N = 11 Reports, 3,199 subjects
Mean Gain: 1.17 Median gain: 1.28
Average Hours of Instruction: 81* (range 36 - 150)

Programs with 180 Hours of Instruction or More Weighted for # of Students

N = 11 Reports, 1,173 subjects
Mean Gain: .61* Median Gain: .86
Average Hours of Instruction: 234 (range 180 - 500)

One may not assume that because only reading and math were tested, only reading and math were taught. A few of the programs analyzed above devoted or may have devoted a significant part of instructional time to English grammar or to other subjects. Some reports are unclear on this point.

* Note that grade level gains per hour can not be computed from the over all averages given in the tables. Grade gains per hour must be calculated separately for each program and averaged.

As the above comparisons of gains in shorter and longer programs suggest, achievement increment per unit of time may be a function of the total duration of the program--with additional hours of instruction beyond a certain point yielding diminishing return. Of course, this result may have been caused by sampling error or by some other systematic difference in the longer programs. However, a tapering off in gains is not surprising if one supposes that the potential for growth in academic skills is not unlimited. Why additional hours of instruction should result in a drop in average gains is a puzzle.

No attempt has been made to estimate grade gains per unit of time, since these would apparently be lowered merely by extending the length of instruction past a certain optimal point. This should be born in mind in interpreting studies in these abstract which report grade gains in this form.

In a few cases, reports have given grade gains in terms of standard scores. These have been converted to grade levels by reference to the manual for the test used. In a few cases, reading, math and english combined gains have been obtained by averaging. The abstracts used in the above computations have been marked in the text with an asterisk.

APPENDIX C

Greg Hodes, Educational Consultant
Teaching Assistance Organization, Inc.

APPENDIX C

It might be useful to delineate some of the areas of adult education research which do not appear to have received sufficient attention.

1. There is a pressing need for controls. One is painfully aware of just how difficult this is to do in the typical manpower training setting. Nevertheless, no satisfactory estimate of outcomes is possible without them. What is needed at the moment is not controls who serve as alternate treatment groups, but rather controls who receive no instruction at all.

2. Assessment of a broad range of achievement, ability, personality, motivation, and background variables should replace the current exclusive emphasis on achievement testing. One needs to know what kind of person the learning does or does not happen to, and a little insight into each of a wide range of relevant and independent traits is to be preferred to a great deal of knowledge about a few isolated factors. Since almost all research with disadvantaged adults must be done in a very practical setting where very lengthy testing is usually not feasible, test publishers might consider the advantage to be had from assembling a comprehensive battery which might perhaps be administered in four hours or less. The chief obstacle is the absence of short achievement surveys which, while not suitable for detailed diagnosis of individuals, are quite adequate and far more convenient for group evaluation. Fuller definition of populations in terms of sufficiently comprehensive and relevant traits may make comparisons between groups more meaningful.

3. Outcomes need to be reported by sex, age, race, etc., as well as for the undifferentiated mass; these probably would yield important differences.

4. It is both practically and theoretically important to know at what point additional hours of instruction begin to yield diminishing returns. One hypothesizes that this will occur more markedly with regard to skills which are more closely related to general intelligence than with regard to other types of learning.

5. Follow-up testing after a year or more is needed to determine how much gain actually "stuck." Again, the need for short, conveniently administered tests is underlined.

6. Better and more explicity defined work in assessing the effectiveness of different methods of instruction, different materials, and different kinds of teachers is needed.

7. Research into the relative roles of "fluid" and "crystalized" intelligence in determining achievement gains is needed. Cattell has formulated a

number of rather clear hypotheses which are relevant to the goals of adult education and relatively easy to test. Piaget's theories provide another area where research might prove both theoretically and practically rewarding. For instance, is the attainment, to some substantial degree, of the stage of "formal operations" a threshold to growth in the higher level academic skills which are the central focus of programs for the disadvantaged? The hypothesis is that those having attained this level will make additional gains with further time and effort, while those who have not will fail to gain under the same circumstances. If one cannot swim at all, staying in the water longer will not get one to the other side. Such a discontinuity should be detectable and would, of course, have important implications.

8. Is there a threshold effect such that, other things being equal, the greater the previous academic exposure the smaller the gains resulting from fruther instruction in <u>general</u> academic skills?

9. In general, more work needs to be done in identifying individuals who can be expected to make practically useful gains in general academic skills within some defined quantity and quality of instructional resources. Implementing such findings will probably prove impossible for reasons connected with general public policy, but the information would be of great intrinsic interest.

10. More needs to be done on the very fundamental and interesting problem of the "meta-ecology" of learning programs: i.e., the interactions among students, staff, administrator, community, etc., as they impinge upon the development of the learning situation. One of the most interesting up-shots of the "war on poverty" was realization that reasonably intelligent and motivated social workers, administrators, secretaries and assorted volunteers were perfectly capable of doing a very creditable job of teaching, after a little experience, without the benefit of elaborate training and conditioning in the schools of education. This process produced a very different kind of program, animated by a very different kind of spirit, and organized along quite different lines.

11. Nothing has been done in manipulating nutrition, medical and pharmacological variables. This, of course, is quite beyond the competence of the non-medically trained researcher.

A problem which appears frequently, particularly in manpower training programs which typically have only limited funds available for research and evaluation, is the plight of the relatively untrained teacher, social worker, junior administrator, or clerk who is assigned the task of "putting together the ABE report by Tuesday morning." Much of the problem is knowing what records to search and what data to report. Where time does not permit reporting all relevant and available information, common sense should be used in reporting the most essential. Where exact figures are not available, estimates can still be very informative: "a little more than half of the students were female" is better than no reference at all to the sex of the students. The great bulk of the data outlined below is routinely collected in instructional programs and should be relatively easy to run down. While the seasoned professional will learn nothing

new from the "checklist" that follows, it is hoped that the novice will find it useful for purposes of evaluation.

STUDENT DATA:

1. Age
2. Sex
3. Race or other ethnic data
4. Number of students (by subcategories, if possible)
5. Marital and household information
6. Rural or urban
7. How selected (criteria such as test scores, income, unemployment, etc.)
8. Socio-economic status (advantaged, disadvantaged, etc.)
9. Special circumstances (e.g., all pregnant women, handicapped males)
10. Other descriptive data such as intelligence and aptitude tests, personality tests and the like. Measures of learning ability are crucial in assessing instructional outcomes and should be obtained if at all possible. If given as pre-test and post-test, reporting should be described in "results" below.
11. Anything else which might help others understand precisely what kind of student the program served.

ATTRITION:

How many students dropped out, and at what point: what were differentiating characteristics, in terms of available data.

CONTROLS:

Move heaven and earth to get suitable controls. "Suitable" means as similar as possible to the treatment group. Possible sources are other programs which do not have an academic component and family and friends of students who may be persuaded to sit in on the testing. Of course, as much as possible of the descriptive data mentioned in this outline should be reported for controls also.

SPECIAL PROGRAM CHARACTERISTICS:

This should include overall program goals (not just the goals of the education component), monetary or other special incentives, special emphasis or the like.

INSTRUCTIONAL CONTENT:

Spell out precisely what subjects were taught. ("A.B.E." might or might not include social science or English grammar, for example.)

LENGTH OF INSTRUCTION:

1. Give the total number of class hours and the number of hours per subject, if possible. In programs of individualized instruction, time per subject will be hard to estimate, but general tendencies may be noted. Of course, the number of hours should be those actually spent in the class room, not those scheduled.
2. Length and frequency of class periods (e.g., "three two-hour sessions per week").
3. Total duration of the program, time between first and last class.
4. If periods are set aside for independent study, this should be described, as should time spent on homework, if that can be estimated.

CLASS STRUCTURE:

1. Student to tutor ratio.
2. Teacher data: age, sex, qualifications, etc.
3. Class structure: tutorial, lecture, independent study, etc. Be very clear about this.
4. Materials: give the publisher, edition, etc., of anything that the reader may not be familiar with.
5. Special instructional techniques.

RESULTS:

1. Pre- and post-test data: Be sure to give this information fully, both part scores and totals. Report pre- and post-test grade levels as well as gains. Describe the test instrument exactly: name, edition, level, form, publisher, and type of score reported. There are technical advantages in doing one's calculations in standard scores, but final results should be given both as standard scores and grade level gains. The most useful data are actual gains, of course. If possible, report gains at successive stages of instructional time, by sex, age, etc., as well as total outcome.
2. Other measures, e.g., intelligence or personality tests, improved attendance, etc.
3. If possible, determine statistical significance of gains. T tests for small groups can be done easily with a desk calculator. For larger groups it is sometimes possible to talk a student or professor out of a few moments of computer time. Be sure to consult a good text or get some expert advice to be sure the statistical treatment is appropriate for the particular kind of data. At the very least, always report means and standard deviations for pre- and post-test groups.
4. Other evaluative data such as cost effectiveness, long term follow-up on income, etc.

DATA RETRIEVAL:

Save data--someone may wish to do further work on them. In organizing research it is usual to keep some sort of roster of basic data. Having this available may save a great deal of time and effort.

APPENDIX D

This list of sources contacted in gathering the documents which were abstracted (and annotated) in this survey is, unfortunately, incomplete. It did not occur to the staff until rather late in the project that such a source list might prove helpful to the readers and as a result some sources may have been omitted altogether and others may be sketchy. A number of individuals, however, were most helpful and the project staff extends its thanks to them.

Some of the original documents will be kept in the library of the Institute for Community Studies, 2 West 40th Street, Kansas City, Missouri, (816) 753-6524, where they are available for use on the premises.

Searches and References

Adult Education Association of the U. S. A., 810 Eighteenth Street, N. W., Washington, D. C. 20006. (202) 347-9574.

American Association of Junior Colleges, Offender Assistance Office, One Dupont Circle, N. W., Washington, D. C. 20036. James Mahoney.

B'nai B'rith Career and Counseling Services, 1640 Rhode Island Avenue, N. W., Washington, D. C. 20036. (202) 393-5284. Explorations II--State Listings of Adult Career Education Activities.

Department of Defense, Washington, D. C. B. Quick, Colonel Boyette, and Dr. Greenberg. (202) 695-3285 and (202) 697-1969.

Division of Adult Education, Department of Health, Education and Welfare, Office of Education, Washington, D. C. 20202. Paul Delker and James Parker. (202) 245-2278.

ERIC Clearinghouse in Career Education, 204 Gurler School, DeKalb, Illinois 60115 (Northern Illinois University). (815) 753-1251.

ERIC Clearinghouse on Reading, 204 Pine Hall, Indiana University, Bloomington, Indiana 47401. (812) 337-5718.

ERIC Clearinghouse on Vocational and Technical Education, 1900 Kenny Road, Columbus, Ohio 43210 (Ohio State University). (614) 486-3655.

ERIC Document Reproduction Service, Computer Microfilm International, Corp., P. O. Box 190, Arlington, Virginia 22210. (703) 841-1212

Federal City College, 1424 K Street, N. W., Washington, D. C. 20005. (202) 727-2045.

Library of Congress, General Reference and Bibliography Division, 10 First Street, S. E., Washington, D. C. 20540. (202) 426-5522.

National Advisory Council on Adult Education, 425 13th Street, N. W., Suite 323, Washington, D. C. 20004. Dr. Eyre.

National Institute of Education, Bureau of Research, Washington, D. C. Joan Cossell. (202) 254-5060.

National Multimedia Center for ABE, National Adult Education Clearinghouse, Department of Adult Continuing Education, Montclair State College, Upper Montclair, New Jersey 07043. (201) 893-4353.

Office of Economic Opportunity (Old Office), Community Services Administration, Washington, D. C. Mr. Macomber. (202) 254-5840.

Operations Division, National Technical Information Service, Springfield, Virginia 22161. (703) 321-8543.

Poverty and Human Resources Abstracts, Sage Publications. (See your local library.)

Project Communication, Kansas State Department of Education, Topeka, Kansas. Dr. Herling. (913) 296-3136.

Southern Association of Colleges and Schools, 795 Peachtree Street, N. E., Atlanta, Georgia 30308. (404) 875-8011.

State Departments of Vocational and/or Adult Basic Education. (Listed in State Administrative Officials, published by Council of State Governments, 1973.)

U. S. General Accounting Office, 441 G Street, N. W., Room 4522, Washington, D. C. 20548.

U. S. Department of Health, Education and Welfare, Office of Education, Division of Manpower Development Training, Regional Office Building, 7th and D Streets, S.W., Washington, D. C. 20202. (202) 245-9834.

U. S. Department of Justice, Bureau of Prisons, Education Branch, Washington, D. C. 20534. Donald A. Deppe.

U. S. Department of Labor, Manpower Administration, Office of Research and Development, Washington, D. C. 20210. Joe Epstein. (202) 376-7346.

University Departments of Economics, Manpower Programs, Business Departments, Continuing Education and/or Adult Basic Education.

University Microfilms, Ann Arbor, Michigan 48106. (313) 761-4700.